The Northwestern-Miller

ESTABLISHED IN 1873

Volume 241
Number 11

MARCH 14, 1950

In Two Sections — Section One

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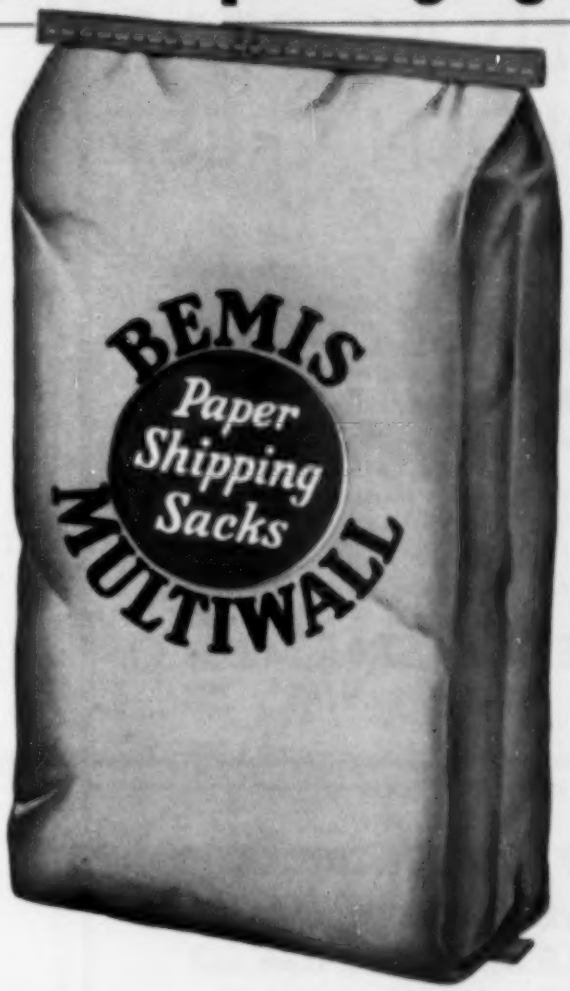

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Issued by
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Executive, Editorial and Publication Offices at
118 So. 6th St., Minneapolis 2, Minn.
Telephone MAin 0575

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TELETYPE CALL NUMBERS: Minneapolis, MP 179; Kansas City, KC 295; Chicago, CG 240; New York, NY 1-2452; Washington, D.C., WA 82.

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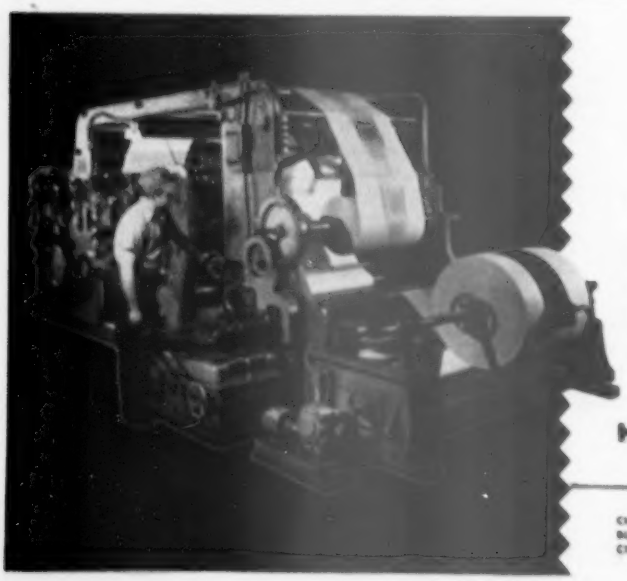

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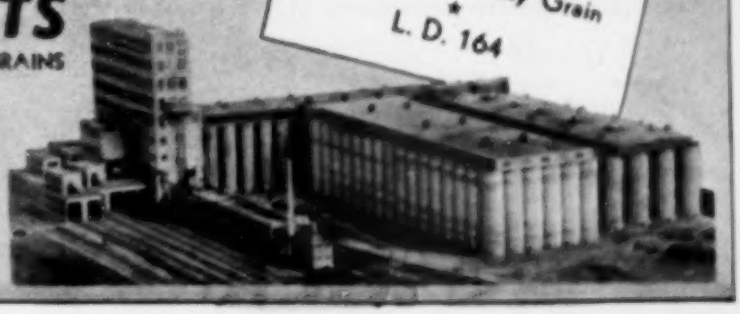

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Skiing is a beautiful sport to watch, but when you're wearing the skis those simple graceful looking maneuvers aren't nearly as easy as they appeared . . . as in most other things, it's all in knowing how. The same thought applies to the milling of flour. All the hard-won skill of Commander-Larabee technicians, millers, and grain experts are needed to assure you of the unerring uniformity and consistent performance you have come to expect from Commander-Larabee flours. No, milling consistently fine flours isn't easy . . . it takes experience, specialized "know-how" and huge facilities. That's why it pays to rely on the great Commander-Larabee family of flours . . . they're milled by men who *know*!

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USDA to Drop Farm Storage Pay

USDA Purchases 700,000 Bu. Wheat at Portland

WASHINGTON—The U.S. Department of Agriculture last week again confined its wheat buying to the Portland area. During the week ended March 10 it purchased 700,000 bu. there. This rate of procurement approximates the rate of export of wheat for U.S. Army program in Japan, which is said to amount to 4 million bushels a month.

Other soft spots in the wheat program appear to have disappeared, particularly the soft wheat area of Ohio, Indiana and Michigan where heavy impoundings of wheat under USDA loans seem to have dried up supplies.

Cumulative statement of procurement of grains and flour by USDA for the period July 1, 1949, through March 10, 1950, follows (in bushels):

	Week of Mar. 3-10	July 1-Mar. 10
Wheat	700,000	[illegible]
Wheat flour (wheat equivalent)		[illegible]
Grain sorghums		[illegible]
Rye		[illegible]
Rye flour (rye equivalent)		102,670
Corn		[illegible]
Barley		[illegible]
Total	700,000	[illegible]

—BREAD IS THE STAFF OF LIFE—

E. C. HILLWEG LEAVES POST ON MINNEAPOLIS EXCHANGE

MINNEAPOLIS—E. C. Hillweg, on the staff of the Minneapolis Grain Exchange for 20 years, has resigned as executive vice president and secretary, and a committee has been named to consider appointment of a successor.

Mr. Hillweg said he is leaving the exchange to take an extended rest and will announce future plans later.

His resignation was accepted with regret March 13 by the exchange board of directors, which appointed a committee to consider the matter of naming a successor. The committee is headed by Robert C. Woodworth, Cargill, Inc., first vice president of the exchange. Members are George W. P. Heffelfinger, F. H. Peavey & Co., and Adrian M. Howard, exchange directors.

—BREAD IS THE STAFF OF LIFE—

ELEVATOR ADDS EQUIPMENT

WEST BEND, IOWA—The Davenport Elevator Co., recently installed new weighing equipment and cooling apparatus for the pellet setup in the new mill, opened a year ago.

—BREAD IS THE STAFF OF LIFE—

Q.M. to Purchase 77,750 Sacks of Hard Wheat Flour

CHICAGO—The Chicago Quartermaster Purchasing Office will open bids the morning of March 22 for 77,750 sacks of enriched hard wheat flour. The flour may be blended hard wheat straight and hard wheat clears and cutoffs, not to exceed 7% ash, or hard wheat enriched 80% extraction flour for export delivery f.a.s. New Orleans, Houston, Galveston, New York, Mobile, Orange, or Beaumont, Texas. It is to be delivered not later than April 25, 1950.

The Quartermaster also will open bids the morning of April 12 for 800 sacks of enriched hard wheat flour for San Diego, Cal., and 800 sacks for Quantico, Va., for delivery April 27-30, and 1,600 sacks for Ranch House, Cal., half for delivery April 27-30, and half for delivery May 27-30.

The purchasing office announced March 7 the following purchases of enriched hard wheat flour for the U. S. Navy:

3,200 sacks at $5.09, domestic cottons, Capitol Milling Co., Los Angeles, to National City, Cal.

The following awards were received by Abilene (Kansas) Flour Mills—

2,400 sacks at $5.52, domestic cottons, to Norfolk, Va.; 800 sacks at $5.55, domestic cottons, to Bayonne, N.J.; 800 saks at $5.15, domestic cottons, to Great Lakes, Ill.; 800 sacks at $5.55, domestic cottons, to Philadelphia; 800 sacks at $5.98, export pack to Newport, R.I.; 800 sacks at $5.93, export pack to Norfolk, Va.

The following awards were received by Globe Mills (Pillsbury Mills, Inc.), Los Angeles—

2,400 sacks at $5.63, export pack, to National City, Cal.; 7,200 sacks at $5.56, export pack to Oakland, Cal.

—BREAD IS THE STAFF OF LIFE—

MINNEAPOLIS BAKERS MEET

MINNEAPOLIS—The Associated Bakers of Minneapolis held its regular monthly meeting at the Schmidt's Brewing Co. the afternoon of Feb. 28, following a Dutch lunch. Samples of Brown 'n Serve products from wholesale and retail bakers were available for comparison, and a discussion of the new baking technique was held. Easter novelties were reviewed.

—BREAD IS THE STAFF OF LIFE—

HIGHER NET REPORTED BY STANDARD BRANDS

Net Sales During 1949 Decline to $262,964,193 from $283,616,094 in 1948

NEW YORK — Consolidated net profit for 1949, after taxes, of Standard Brands, Inc., and subsidiaries operating in the U.S. was $8,189,138, equivalent, after payment of preferred dividends, to $2.34 a share on the 3,174,527 shares of common stock. On the same basis, consolidated net profit for 1948 was $7,277,727, or $2.05 a share after preferred dividends. The 1949 earnings are reported after year-end inventory writedowns approximating $1,500,000.

Net sales were $262,964,193, compared with $283,616,094 in 1948.

Sales of subsidiaries operating outside the U.S. in terms of U.S. dollars totaled $32,644,000, and combined profit from operations, before currency devaluation write downs of $1,015,698 but after provision for such subsidiaries' foreign and U.S. income taxes, was $2,292,963. Dividends received from such subsidiaries totaled $1,129,177 in 1949, as compared with $1,231,735 in 1948.

—BREAD IS THE STAFF OF LIFE—

KROGER SALES DIP

CINCINNATI—Sales of the Kroger Co. for the second four-week period, ending Feb. 25, totaled $63,045,533, representing a small decrease from sales of $63,251,955 for the same period a year ago. Cumulative sales for the two periods of 1950 totaled $122,369,887, 3% less than sales of $125,780,835 for the same two periods last year.

WHEAT, SOYBEANS, FLAXSEED AFFECTED BY POLICY CHANGE

Payments of 7¢ Bu. Will Halt Under Plan Said to Have Sec. Brannan's Approval; Farmers Also Must Pay for Commercial Storage of Crops Under Loan

By JOHN CIPPERLY

Washington Correspondent of The Northwestern Miller

WASHINGTON — Repudiation of previously announced government farm storage policy was seen this week when it was disclosed that the U.S. Department of Agriculture was about to drop its farm storage payments on the 1950 wheat, soybean and flaxseed crops. The payment has amounted to 7¢ bu.

This provision for farm storage payments has been contained in the wheat loan programs for several years and was designed to hold wheat back at the farm level. It was also used to encourage the building of farm storage.

Production and Marketing Administration grain branch officials are denying any part in the new policy and are admitting privately that it represents "welshing" on previous USDA policies.

Previous Statement

On June 7, 1949, in an effort to expand farm storage, Charles F. Brannan, secretary of agriculture, said in a press release numbered USDA 1169-49-3, "As part of this effort to increase farm storage quickly, the Commodity Credit Corp. will make loans to farmers for the purchase or construction of farm storage to the extent of 85% of the cost of the facility. These loans, bearing interest at the rate of 4% a year, will be payable in five annual installments, or earlier at the farmers' option."

At that time, farmers storing wheat, soybeans or flaxseed could obtain 7¢ bu. for farm storage.

Now, under the proposed change in the loan program, the farmer will lose the incentive which the USDA had in effect at the time it encouraged the erection of farm storage of these grains. One USDA official stated that it was about time that the farmer was drawn into some responsibility for this storage. However, there was nothing in the statement quoted above which mentioned any farmer responsibility for farm storage.

PMA grain branch officials divorce themselves from the new policy, attributing it to the price support and foreign supply program division of NUSDA.

Brannan Approval Claimed

However, the policy has already been approved by the CCC board of directors and has been given the green light by Secretary Brannan, according to reliable USDA officials.

The approval of Secretary Brannan may indicate the real policy line at USDA.

Speaking before the National Farmers Union convention at Denver March 6, Secretary Brannan indicated some doubt over the advisability of wheat price supports at 90% of parity. On that occasion he said in

(Continued on page 21)

Wheat Exports Soar; ECA Grants Promise Increased Flour Sales

While flour sales in the export field were extremely limited last week, wheat export business reached one of the highest points of the crop year. The flour trade, however, was encouraged by the new Economic Cooperation Administration grants, and further sales of flour in Europe are expected shortly.

Greece was granted $1,086,000 for the purchase of flour, and this buying will be done by Production and Marketing Administration in the near future. Italy was furnished with an additional $704,000 with which to buy flour. ECA authorized $300,000 to Norway for the purchase of low grades, and Ireland was granted $88,000 for U.S. flour.

Jamaica bought 30,000 sacks of low grades March 13, and 60,000 additional sacks will be bought March 18. Importers paid $3.04@3.27 c.i.f. Kingston, for maximum 1% ash flour. Mills will receive an equivalent top of $3.80 Osnaburgs, Gulf. U.K. buyers apparently were still inquiring for flour, indicating some additional interest in buying .46% ash, 11% protein hard winters, f.a.s. Baltimore. Latest purchases were on the basis of $4.18, Baltimore, after subsidy.

More than 8 million bushels of U.S. wheat were sold for export last week, one of the largest volumes for any one week of the current crop year. Italy bought 2,250,000 bu. at 20⅝¢ over Chicago March, f.o.b. Gulf clearance last half April for No. 1 hard and around 2½¢ less for No. 2 hard. Portugal purchased 700,000 bu. of No. 2 red for March shipment at 21@22¢ over Chicago March f.o.b. Philadelphia.

Mexico purchased 1,800,000 bu. of hard wheat for April shipment from the Gulf and all-rail across the border. Great Britain bought 350,000 bu. No. 2 red for shipment from seaboard and 350,000 bu. of No. 2 hard for gulf shipment.

The market for U.S. flour in Latin America has been reduced to the lowest point of the crop year.

Funds from ECA to Aid IWA Sales

GRANTS EXPECTED TO ASSURE U.S. HALF OF YEAR'S QUOTA

New Purchases to Reduce U.S. Quota Balance to 85 Million Bushels; Doubt Expressed that Belgium, Italy Will Take Full Amounts

By JOHN CIPPERLY

Washington Correspondent of The Northwestern Miller

WASHINGTON — Economic Cooperation Administration procurement authorizations last week amounting to approximately $20 million will reduce the guaranteed wheat export balance to be shipped of the U.S. quota under the International Wheat Agreement to approximately 85 million bushels as soon as these sales are registered with the Commodity Credit Corp.

In seven and one half months of the pact's life the U.S. will have sold slightly over half of its guaranteed wheat sales of 168,706,000 bushels. A study of the unfilled guaranteed import quotas of the participating nations discloses that the market for the largest part of the unfilled sales quota of the U.S. is in ECA financed nations, and there is some official doubt that the entire guaranteed import quotas of two of these nations, Belgium and Italy, will be required by them except at the floor price of the IWA.

An analysis of the ECA financing of wheat and wheat flour procurement authorizations through March 11 discloses that approximately 13½% of wheat has been exported in terms of flour when calculated on a dollar authorization basis for wheat. The remaining large unfilled quotas which would be sold under ECA financing, if purchased, will, with the possible exception of Belgium, receive their 12½% mandatory share in the form of flour. Those nations are Greece, Austria, Italy, The Netherlands and Norway.

Other potential flour sales to IWA nations may be found in the yet-to-be-filled quotas of Cuba, the Philippines, Saudi Arabia, Israel and Brazil, which to date has made no purchases against its guaranteed import quota of 13,228,000 bu.

Doubt Price Drop

Conversations with a leading government official reveal that it is extremely unlikely that either Italy or Belgium will take their guaranteed wheat import quotas except at the floor price of the IWA, and it is doubted that the U.S. will drop its price to the flour and put the wheat to these nations. Consequently, any estimate of further flour sales on the basis of the unfilled guaranteed import balances of these nations should be written off in any conservative estimate of probable flour business through the IWA when financed by ECA funds.

Information from this reliable source leads to the conclusion that the U.S. will not complete its guaranteed sales under the IWA this year unless it wishes to make the price sacrifice.

The effects of delays in the ratification of the IWA pact by such countries as Cuba and the Philippines in terms of U.S. flour sales can now be more clearly measured. In fact, under the IWA Cuba has bought flour from Canada on a two for one dollar basis as compared with sales from the U.S. In the case of the Philippines U.S. milling interests also have fared badly through the delay of the Philippine government to ratify the pact, although at the same time Canadian and Australian millers freely entered that market at price levels domestic mills could not meet.

On the bright side are some hidden demand factors which do not appear in the IWA balance sheet. For example, Germany will be a buyer of approximately 15 million bushels of wheat between now and July 1, of which it is expected 12½% will be in the form of flour. The Netherlands will also buy wheat in addition to its guaranteed purchase quantity under IWA, and under ECA financing it will also buy flour to the extent of 12½% of its wheat purchases over and above the IWA limit. Other bits and pieces of demand, as for example the Portuguese requirement, will expand the demand for U.S. wheat and probably bring the ECA-financed wheat up to the expected 232 million bushels for this year as originally estimated by that agency in its budget.

A recapitulation of these estimates casts doubt on the ability of the U.S. to export 350 million bushels of wheat this year. If the ECA estimate of 232 million bushels plus an additional 50 million bushels to Japan is attained it may be seen that the U.S. will have to export an additional 68 million bushels to all other areas if the 350 million mark is to be reached by June 30, 1950.

Other Outlets Limited

The IWA Latin American market, including the largest unit of approximately 13 million bushels for Brazil, shows an export potential of only 25 million bushels if the U.S. captured all of this business. Mexico has an unfilled import quota of 2,416,000 bu. in the IWA which probably will be bought in the U.S., but this is wheat and will not represent any flour business on the basis of historical dealings with that nation. Other possible export outlets for U.S. wheat and flour, including the Philippines with a prorated guaranteed import quota of approximately 3 million bushels, discloses a potential not in excess of 8 million bushels under IWA.

This indicates that the U.S. guaranteed sales in the IWA will fall short by between 35-40 million bushels if the U.S. is able to attain the most optimistic estimates mentioned above.

The entry of Germany and Japan into the wheat pact would in no way affect these estimates since the German and Japanese wheat quotas are being redistributed among all the exporters. About all the entry of Japan will mean this year is that the army will obtain cheaper wheat at the IWA price ceiling than it is now paying in the open market. The inclusion of Germany within the IWA merely means that this quantity will be added to the total guaranteed export quantity. It will not erase the gap between guaranteed sales and total amount claimed by importers or the amount put to them at the floor on the basis of the currently assigned U.S. export quota of 168 million bushels.

FDA to Study Insect Infestation of Wheat on Farms, in Elevators

MANHATTAN, KANSAS — A spokesman for the Food and Drug Administration of the Federal Security Agency indicated, during an address presented before a meeting of operative millers here March 11, that his organization plans to devote some attention in the future to the wheat producing and handling industries in a program which will be coupled with the flour mill sanitation program.

J. O. Clarke, director of the division of program research for the Food and Drug Administration, during the course of his address, said there is a "stern necessity" for improvement in the wheat producing industry.

"In the production and marketing of many agricultural commodities, there is an opportunity for the first processor to pick and choose raw materials of better quality for the production of food since there are industrial outlets which can take the less desirable raw materials," Mr. Clarke said. "This is not normally true in the flour milling industry for the reason that our wheat must go into human food. In these circumstances we cannot escape the conclusion that wheat, from a long range standpoint, must be protected from contamination and its fitness for food purposes maintained."

Mr. Clarke explained the plan for the proposed study of insect infestation in wheat and contamination of flour to the operatives, members of Districts 1 and 2 of the Association of Operative Millers. He said the program includes two fields of investigation. First, a mill program to determine the relationship of insect and rodent infestation in wheat to the contamination in the flour made from that wheat. Second: A wheat program to determine the incidence and level of insect and rodent infestation in commercial wheat.

16 Mills to Be Used

Operations under the mill program, he said, will involve a study in 16 selected mills strategically located throughout the U.S. Since the purpose of the study is to find out the effectiveness of the wheat-cleaning procedure in the mills, only mills which are rated as operating under sanitary conditions will be used, Mr. Clarke explained. He added that the results obtained in the study will not be used in regulatory measures.

The wheat program, he said, will be conducted in slightly more than 100 mills located throughout the U.S. The purpose of the wheat program is to obtain information on the degree and kind of infestation in this country's entire wheat production over a period of one year.

The location and size of the mills included in the wheat program were selected on the basis of a statistical formula and Mr. Clarke told the millers that if "your mill is not selected for the study, please do not feel that you are being discriminated against." He said that an attempt will be made to evaluate the incidence and severity of insect infestation by the examination of approximately 1,600 samples from a total production of some 400,000 cars of wheat.

The Food and Drug Administration official complimented the milling industry on its self-improvement program, begun more than two years ago with the establishment of the technical service department of the Millers National Federation.

"The milling industry has shown a very high degree of cooperation in the development of our plan and we are quite sure that this spirit of cooperation will be continued as the work progresses," he declared. "I can pledge you that, in carrying out the work in your mills, our representatives will interfere as little as possible with the normal routine of your establishment."

He said that as the work pro-

Ed Morgenstern

NEW NGTC CHAIRMAN—Assuming the chairmanship of the National Grain Trade Council is Ed Morgenstern, Salina, Kansas, shown above. The grainman is president of the Robinson Milling Co. and is the first council chairman out of the Southwest since Frank A. Theis, Simonds-Shields-Theis Grain Co., Kansas City, headed the group four years ago.

GAVEL PRESENTED BY FAR EAST GROUP

CHICAGO—An unusual feature of the opening session of the annual meeting of the American Society of Bakery Engineers was the presentation of a gavel from the Far East Scientific Bakers Assn. The presentation was made to Harold Moody, ASBE president, by William E. Doty, California Raisin Advisory Board, Fresno, Cal., on behalf of Kiyoshige Mizutani, chairman of the Far East group. The gavel and a pounding block in the form of a cake are made from solid "Keyaki" wood. Mr. Mizutani was a member of the 1924 baking class of the American Institute of Baking.

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gresses, a mill representative will be encouraged to take duplicate samples of the wheat and flour to be analyzed by the Food and Drug Administration, and that the results of the analyses will be made available to the mill for checking its own analyses.

FDA Trains Inspectors

The Food and Drug Administration held two "schools" in Kansas City recently to train its inspectors and chemists who will do the work in the survey. Each school was for one week and the two groups which underwent training were inspectors and laboratory analysts.

E. B. Hite, Midland Flour Mills Co., Kansas City, chairman of District 2 of the operatives' organization, was chairman of an open forum on mill sanitation following Mr. Clarke's address. In his opening remarks, Mr. Hite said that it seemed to him that there should be some incentive for producers and handlers of wheat to encourage them to take better care of the wheat before it reaches the miller. The miller, he said, can do a good job in eliminating external infestation, but there is no known way at this time of eliminating all of the hidden infestation and producing flour free from insect fragment contamination.

C. E. Skiver, director of the Kansas Wheat Improvement Assn., asked Mr. Clarke whether it would be possible to use the evidence collected in the Food and Drug Administration's study of the relationship of infested wheat to insect fragments in flour in bringing about a revision of the U.S. grain standards which would grade down infested wheat.

Mr. Clarke said that he was not qualified to discuss any needed revision in the grain grades, and added, however, that the dairy industry accomplished much in bringing about a grade differential for undesirable cream marketed by dairymen.

"Rule of Reason" Applies

Major S. Howe, superintendent of the J. C. Lysle Milling Co., Leavenworth, Kansas, asked Mr. Clarke whether the Food and Drug Administration had ever established a maximum limit for the number of insect fragments found in flour. The Food and Drug Administration representative said there was no absolute figure prescribed.

"We know that it is not possible for the milling industry consistently to produce flour which is absolutely free of inconsequential amounts of foreign material," he said. "In applying the provisions of the Pure Food, Drug and Cosmetic Act, the Food and Drug Administration is dedicated to the application of the rule of reason."

O. J. Zimmerman, assistant director of manufacture, General Mills, Inc., Minneapolis, asked Mr. Clarke a number of questions regarding sampling techniques to be used in the course of the mill survey. Mr. Zimmerman wanted to know how the Food and Drug inspectors could be certain that the samples of flour collected were milled from the wheat, of which samples also will be taken. He pointed out that the length of time required for the complete milling cycle varies between mills. Mr. Clarke replied that the inspectors will ask the cooperation of the superintendents of the mills in making sure that the wheat and flour samples are from the same lot of wheat.

M. C. Belan, general superintendent, Rodney Milling Co., Kansas City, spoke briefly at the conclusion of the open forum and urged the mill superintendents to cooperate with the Food and Drug Administration in the sanitation survey. "These fellows know their business, they're nice fellows, and all of us will learn much from the results of the work they plan to undertake," Mr. Belan said.

ALFRED F. PILLSBURY DEAD AT AGE OF 80

Son of Milling Company's Co-founder Devoted Long, Active Life to Business, Civic and Cultural Interests

MINNEAPOLIS — Alfred Fiske Pillsbury, aged 80, a director of Pillsbury Mills, Inc., and a lifelong leader in Minneapolis civic and cultural circles, died March 12. He was the son of John Sargent Pillsbury, former governor of Minnesota and co-founder of the Pillsbury enterprise. For 30 years he served as the company's treasurer.

Alfred Fiske Pillsbury

Mr. Pillsbury was born in Minneapolis Oct. 20, 1869, and attended the public schools, subsequently graduating from the University of Minnesota's college of law. A year later (1895) he went to work for his father's company, with which he was associated for most of the remainder of his life. Several years, following his father's death in 1901, were devoted to administering the family estate.

In 1908, Mr. Pillsbury became a director, and a year later he participated in the incorporation of the Pillsbury Flour Mills Co., which then began operating under lease the properties owned by the Pillsbury-Washburn Flour Mills Co., Ltd., a British company which in 1889 had acquired three plants formerly owned by the firm of Charles A. Pillsbury & Co., and two plants formerly owned by the Washburn Mill Co.

Again in 1923, Mr. Pillsbury participated in a dramatic phase of the company's history—the liquidation of the British firm and the restoration of full ownership and control to the American operating company. When the Pillsbury Flour Mills Co. was organized in 1908, he was appointed secretary and treasurer. He remained secretary until 1921 and treasurer until 1939.

Many Other Activities

Many other business enterprises claimed a share of Mr. Pillsbury's energies and talents. He was a director and member of the executive committee of the First National Bank of Minneapolis; a director of the First Bank Stock Corp.; a trustee of the Farmers and Mechanics Savings Bank; a director of the Northwestern National Life Insurance Co., and a director of the Twin City Rapid Transit Co.

Mr. Pillsbury was a member of the Minneapolis Park Board from 1929 to 1946, with the exception of a two-year interval in the thirties. He also was president for 13 years of the Minneapolis Society of Fine Arts and a trustee of the Minneapolis Symphony Orchestra Assn.

Notable Art Collections

The Alfred F. Pillsbury collection of Chinese bronzes is regarded the best in the western world, and his jade collection ranks second. He was internationally-known as an authority on the two subjects. His jades are all ancient, of the Chou and Han dynasties (2000 B.C. to about 200 A.D.). He also collected rare monochrome Chinese porcelains, including many fine examples of the Kang-Hsi and Ch'ien Lung dynasties.

Recent additions to his collection of bronzes — three ancient bronze vessels—were placed on exhibit at the Minneapolis Institute of Arts with other selections only a few weeks ago.

Football Star

During his college days Mr. Pillsbury was intensely interested in athletics—particularly in football. In fact, it was he who purchased the first football ever used at the University of Minnesota. Since there were no eligibility rules in those days, he played quarterback on the Varsity squad during the entire seven years of his academic and law courses, captaining the team in his last two years. He was the first Minneapolis owner of a high-wheeled bicycle and one of the first owners of a motor car, in which he participated in early hill-climbing contests.

Mr. Pillsbury was president emeritus of the First Universalist Society of Minneapolis. He served as president of the society for more than 15 years until Jan. 10, 1950. He was a member of Church of the Redeemer.

He also was a member of Chi Psi fraternity, and of the Minneapolis and Skylight clubs and Woodhill Country Club.

Mr. Pillsbury was married in 1899 to Eleanor L. Field of Boston, the daughter of Chief Justice Walbridge Abner Field of the Massachusetts Supreme Court. Mrs. Pillsbury died Nov. 2, 1946. They had no children.

R. C. Bartee

MILLERS CLUB PRESIDENT — R. C. Bartee, General Mills, Inc., Chicago, was elected president of the Chicago Millers Club at a recent meeting of the organization. He succeeds E. W. Dodson, formerly of B. A. Eckhart Milling Co.

ALBERT GOCHICOA, ARROW EXPORT MANAGER, IS DEAD

HOUSTON, TEXAS — Albert Gochicoa, export manager for Arrow Mills, Inc., Houston, died March 6. He had been in poor health for several months and had been confined to his home for most of that time.

Mr. Gochicoa was appointed export manager of the milling firm in 1937 when it was operated as the Houston Milling Co. and had charge of the foreign business of the organization since that time. Previously, he had been export manager for Universal Mills, Inc., of Fort Worth, Texas.

Surviving is his widow, Mrs. Grace Gochicoa.

Cuban Flour Imports Increase

HAVANA—Cuban imports of U.S. flour in January were the largest for that month since 1947, according to P. E. Carr, import-export statistician. Imports in January totaled 193,871 200-lb. sacks, compared with 186,360 in December and 140,638 in January, 1949. The largest imports for January in the past six years occurred in 1945, when 311,414 sacks were imported from the U.S. Details are shown in the following table:

CUBAN IMPORTS OF UNITED STATES FLOUR BY MONTHS (200-LB. SACKS)

	1945	1946	1947	1948	1949	1950
January	311,414	39,902	373,255	124,432	140,638	193,871
February	248,149	191,904	127,407	71,237	136,928	......
March	161,711	229,442	74,524	109,885	124,870	......
April	127,973	124,904	152,262	96,412	114,743	......
May	134,725	141,143	136,112	69,425	127,914	......
June	284,731	132,385	343,296	171,420	138,183	......
July	338,638	125,742	191,422	101,092	100,394	......
August	302,200	143,604	183,889	118,282	117,119	......
September	291,451	36,835	128,451	103,443	119,954	......
October	5,768	58,344	84,753	113,884	73,300	......
November	7,757	234,644	139,782	68,223	178,424	......
December	28,440	286,439	143,589	116,801	186,360	......
Totals	2,005,726	1,728,414	1,898,431	1,281,492	1,673,445	......

Domestic Flour Market Expanding

10 MILLION NEW USERS SEEN IN INCREASING POPULATION

Analysis to Be Presented by Lloyd Ellingwood, Long Range Program Director, at May Convention of Millers National Federation

CHICAGO—The combination of marriage and high birth rates is producing an ever-expanding, domestic market for wheat flour foods, it is pointed out by Lloyd Ellingwood, director of the Millers' Long Range Program. This provocative prospect is developed as part of a study to be presented in detail at the Millers National Federation convention, May 15-17, at the Edgewater Beach Hotel in Chicago.

The study shows that in the past the decline in per capita consumption has more than been made up by increasing population. But now, for the first time, it was pointed out, millers will begin to feel the pinch of actual shrinkage in total domestic consumption, unless the per capita decline is halted.

"In its presentation of possibilities, the long range picture is in sharp contrast to the gloomy and widely circulated report of current declining per capita consumption released by the Bureau of Agricultural Economics," Mr. Ellingwood reports. "Not one but several authorities can be quoted to support the optimistic tone. For instance, Sumner H. Slichter, Harvard economics professor and chairman of the research advisory board of the Committee for Economic Development, advances the prediction that U.S. population will hit 175 million by 1975.

"With the Census Bureau's nose count expected to show at least 150 million persons this year and possibly 152 million, Mr. Slichter's estimate is considered definitely conservative, for a number of reasons.

"Forecaster Margaret Jarman Hagood predicts in a study for the Department of Agriculture that population will reach 188.5 million by 1975, assuming high birth rate, low mortality and 200,000 per year immigration. Of more immediate interest to millers, the Hagood projection pegs population at 158.6 million by 1955 and 172.2 million by 1965.

"She bases her forecasts on an earlier Census Bureau prediction by P. K. Whelpton which sets 185 million as the predicted high for 1975 under the same conditions. Mr. Whelpton fell three to four million short of the accepted mark in his forecast for 1950.

"Joseph S. Davis of the Food Research Institute of Stanford University feels that Hagood and Whelpton are both too conservative and that—like almost all previous forecasts—their predictions are too low. Mr. Davis himself expects present trends to point toward 193 million people by 1980, with corresponding increases along the line for the 50's, 60's and 70's.

New Customers Seen

"Whatever the final outcome, the milling industry can look for 10 million or more new customers during the next decade. By holding its own, the industry has a domestic production potential as high or higher than the recorded peak of domestic consumption in 1909, with per capita intake of flour approximated 210 lb."

The accompanying chart translates this rising tide of population into wheat flour consumption. If per capita intake can be held steady at current levels then total consumption obviously may tax present mill capacities within the next two or three decades, it is pointed out.

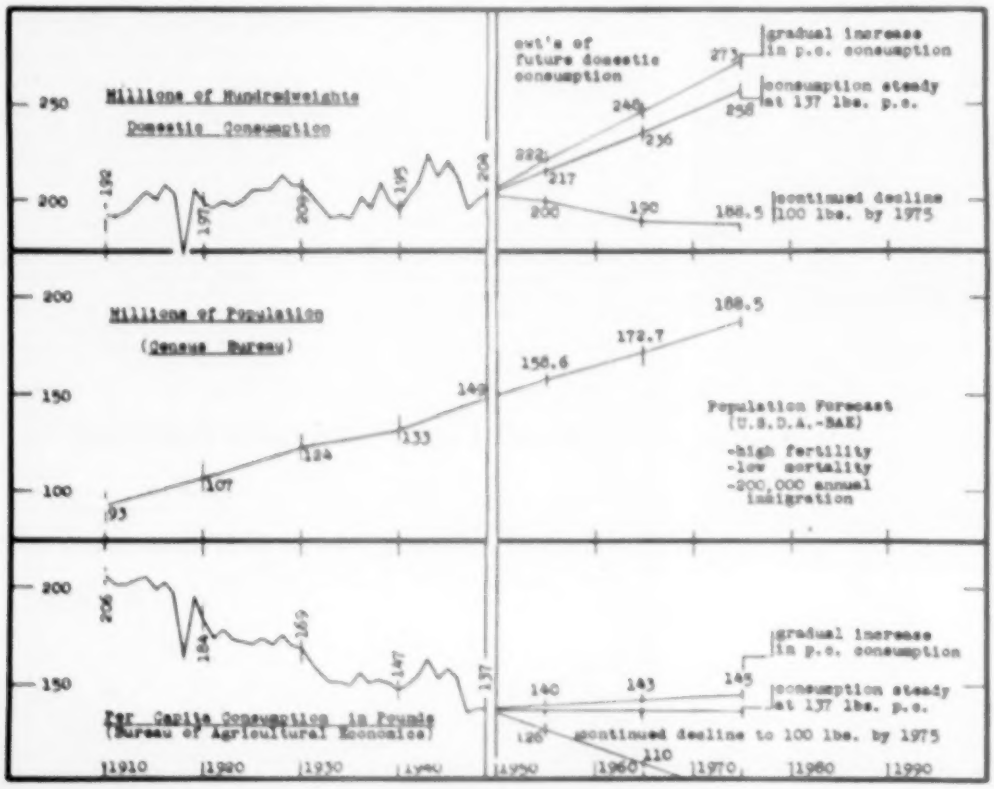
If the milling industry can induce people to eat as little as one and one half (1-oz.) slices of bread more each week, the point of theoretical full production may come within the next few years, depending, of course, to some extent on the export volume, Mr. Ellingwood predicts.

"On the other hand, if per capita consumption is allowed to decline unchecked at the rate it has established during the past 40 years, it can sink to approximately 100 lb. a person by 1975," he warns. "With this prospect of 'do nothing,' millers must accept the inevitable shrinkage in total national consumption, meaning lower output and more idle capacity.

"Improvement in total national consumption appears, however, to be well within the grasp of the industry. The declining popularity of the product presents the only grave question and the number one problem of the Long Range Program. But if the Long Range Program wins even the slightest increase in per capita consumption, the fractional dividend in an extra slice of bread for every person is multiplied by the millions of population into an all-time high in production."

David S. Jackman

REAPPOINTED TO BOARD—David S. Jackman, vice president and general manager, Kansas Milling Co., Wichita, has been reappointed for a six-year term to the board of governors of the University of Wichita Foundation for Industrial Research. He has been associated with the organization since 1944 and has served continuously as chairman of the board.



Encouraging as this picture is, however, Mr. Ellingwood's population analysis underscores the dangers of complacency. The great mass of consumers is not static, but ever-changing and growing, not only in numbers but in new eating habits and characteristics. For instance, the average age of the American populace will move forward through the 30-year-old bracket during the next decade. There will be more people of retirement age because of lower mortality. But at the same time there will be more young people.

Program Attacks Problem

The study points out that 40% of all families are new families since 1940, untrained in habits of bread and flour consumption. Income levels have increased, and nine million people have moved from rural areas, where consumption is higher, to the cities. The millers' program attacks this problem with advertising, publicity, education and promotion—a 4-way drive to establish a new pattern of eating habits in favor of wheat flour foods.

"It is apparent in the past that declining per capita consumption came despite individual brand promotion within the industry," Mr. Ellingwood points out. "Brand competes against brand and company against company for individual sales gain or loss, without increasing the favorable acceptance of the industry's basic product. At the same time, the 'easy-to-use' foods that are 'good-for-you' as well as good in taste, appear to gain favor at the expense of flour.

"In the face of this challenge, the

milling industry can look forward to a prosperous future of its own creation, according to the logic of the population study, creating its expanding market through the Long Range Program."

WILLIAM A. MOSES, GRAIN FIRM FOUNDER, DIES AT 91

KANSAS CITY—William A. Moses, 91, one of four brothers who founded the Moses Bros. Mill & Elevator Co., Great Bend, Kansas, and who was prominent for some years in the grain business of the Southwest, died at his home in Manhattan Beach, Cal., March 8.

Mr. Moses started with the family flour milling business in Great Bend and continued in milling until about 1900, when he moved to Kansas City and entered the grain business. The grain company, in which his brother, L. E. Moses, also had an interest, was known as Moses Bros. & Dodge. William A. Moses once served as vice president of the Kansas City Board of Trade.

Mr. Moses took no active part in the family flour business after the Moses plant became part of the Kansas Flour Mills Co. consolidation. He left Kansas City and moved to southern California in 1912.

Mr. Moses was among a group of Kansas City businessmen, many of them grain dealers, who formed the Lucky Tiger Gold Mining Co. in 1903 to purchase the rich mine in Sonora, Mexico, which had been discovered by a prospector, John Hohstadt, in the previous year. In 20 years ore valued at more than $49 million was mined and more than $14 million in dividends paid to stockholders. The venture was profitable until about 1937 when adverse labor conditions and enormous taxes began to cause difficulties.

Mr. Moses served as vice president of the mining firm for a period and was one of the original directors. He also had an interest in lead and zinc mining operations in the Joplin, Mo., area. Surviving are a son, Arthur Moses of San Gabriel, Cal., and a daughter, Mrs. Elinor Ortion of New York City.

FMA Appoints Gordon B. Wood Manager of Sales

KANSAS CITY—Gordon B. Wood has been appointed general sales manager for Flour Mills of America, Inc., Kansas City, Henry H. Cate, president of the milling firm, has announced.

Mr. Wood will be associated with W. R. Duerr, vice president and executive sales director of the milling company, in directing domestic sales.

Mr. Wood started in the flour business in Kansas City as a local salesman for the former Kelly Milling Co. there, but shortly afterward joined the Midland Flour Milling Co. in a similar capacity. Subsequently he became sales manager for Midland and became well known to flour buyers throughout the country.

Gordon B. Wood

Mr. Wood will assume his new duties immediately.

AMERICAN BAKERIES REPORTS HIGHER NET

1949 Sales Also Increase from Previous Year's Figure, C. S. Broeman, President, Reports

ATLANTA—Net income of American Bakeries Co. for the year 1949 totaled $2,703,895, compared with $2,588,604 for the previous year. Sales for the year also showed an increase over those of the previous year, according to C. S. Broeman, president, in his annual report to stockholders.

At the close of the fiscal year current assets totaled $6,278,315, of which $4,634,706 was in cash and government securities, while current liabilities were $1,997,724. Net working capital amounted to $4,280,591 compared with $3,705,036 Jan. 1, 1949.

Capital expenditures for improvements, extensions and additions during 1949 totaled $1,349,052. Operations were charged with $1,801,526 for depreciation, maintenance and repair of property, plant and equipment.

"Construction of a new plant has started at Rocky Mount, N.C., and operations are expected to commence in October of this year," Mr. Broeman said. "Modernization of the Birmingham cracker plant has been authorized and completion is anticipated in the early fall. Plans for building or remodeling other plants have been deferred in favor of the construction work at Rocky Mount and Birmingham."

WARD BAKING DIVIDENDS

NEW YORK—Faris R. Russell, chairman of the board of the Ward Baking Co., has announced that the directors have declared the regular quarterly dividend of 1⅝% ($1.37½ a share) on the outstanding 5½% cumulative preferred stock of the company, and also declared a quarterly dividend of 25¢ a share on the outstanding common stock. Both dividends are payable April 1 to holders of record March 18.

Quote

" . . . . in potato and other commodity price support operations we have found that it is easier to buy than it is to sell." Charles F. Brannan, secretary of agriculture, in his annual report.

Arthur C. Ewer

Frank M. Ewer

103 YEARS OF BEMIS SERVICE—When Arthur C. Ewer, manager of the Bemis Bro. Bag Co.'s Brooklyn plant, celebrated his golden anniversary with the company recently, he became the second of two brothers to pass the 50-year mark with Bemis. His brother, Frank M. Ewer of the Boston office, a vice president and director, reached his 50th anniversary with the company three years ago. So, together, they have a total of 103 years of Bemis service. Both joined the company in the Boston office, Frank in 1896 and Arthur in 1900. Frank's service in addition to his work in the Boston office, includes duties as assistant manager and manager of the San Francisco office. He was elected treasurer and a director in 1921 and vice president in 1940. Arthur Ewer was named manager of the Brooklyn factory in 1935 after serving previously in Boston, St. Louis, Denver, San Francisco and Memphis. He was manager of the Memphis office.

Response Remarkable:

Bread Developed in Kansas Contains 16% More Flour

WICHITA, KANSAS — The office of the Moore Grain Co. was a spot popular with tenants of the big Wheeler-Kelly-Hagny Building in downtown Wichita, March 10. For Ralph S. Moore and his brother, Harold J. Moore, the owners of the grain company, were distributing loaves of bread to one and all while the supply lasted.

The "bread line" at the Moore office received a new kind of Kansas loaf. A "grass roots" rebellion against commercial bread has been spreading over the wheat-growing state in the past few weeks. It began as a one-man revolt, but it quickly gathered supporters and has grown now to some significance.

Morris Coover, a farmer and business man of Kinsley, Kansas, started it. He enlisted the support of four other Kinsley men—Jerome K. Wilson, county attorney; William G. Walters, motor car dealer, and James Ehlers, a clothing merchant.

More Wheat Into Bread

These men believed the wheat surplus problem might be licked by putting more wheat into bread, thus using more of the farmer's output and at the same time producing a better and more tasty loaf of bread.

"I went to a local baker," Mr. Coover explained, "and told him I wanted a loaf of bread that tasted like old-fashioned bread baked at home. After some experimenting we found that using 16% more flour would produce the kind of bread my mother used to bake."

At the first the Hershey Bakery in Kinsley was not enthusiastic, but Mr. Coover finally talked the baker into a trial of 15 loaves of the heavier bread, charging 5¢ a loaf more than for the regular loaf. Five of the original purchasers, who were given no promotional talk, came back for more. Meanwhile, Mr. Coover distributed some of the bread at club meetings and asked for consumer reactions.

Response Remarkable

The response was remarkable. In three weeks the Hershey Bakery, which had never quite reached its pre-war volume of sales, was baking 75% more bread than during its former peak days. The bakery began getting orders from all parts of the state as the publicity spread. Recently the Western Kansas Development Assn. has taken the campaign in hand and the 16%-more-flour bread is being served to club meetings all over southwestern Kansas and news of the loaf is spreading throughout the state.

It was a director of the association that provided the loaves for the Moore "bread line."

The new bread was served to some 300 Kansas Democrats who attended a party meeting in Topeka recently. Most of them thought they were eating home-made bread. That is the general consumer reaction.

The bakery division of J. S. Dillon & Sons Co., Hutchinson, Kansas, chain store organization, is planning to market a loaf made from the Kinsley formula and will have the bread available in a short time.

So the one-man campaign seems likely to have some substantial consequences in Kansas at least.

FLOUR BUYING PACE SLOWS AS WHEAT MARKET CLIMBS

Buyers Book Only Nearby Supplies, Set Up P.D.S. Schedules as Resistance to Advance Bookings Grows; Exports Slower

Flour business is slow again following the flurry of spring wheat flour bookings reported a week ago. Sales declined sharply last week as buyers showed their resistance to the strong trend in wheat and flour prices by booking only fill-in lots or setting up price-date-of-shipment schedules with mills. Two of the largest buyers in the Southwest are now buying on a p.d.s. basis. Shipments from mills in that area are exceeding new bookings, and unfilled order balances average between 18 and 28 days' running time. The backlog of bookings held by spring wheat mills is estimated at about 30 days. Buying in recent weeks seems to confirm the observation that bakers intend to stand by their hand-to-mouth policy through the remainder of the crop year.

BRITISH PURCHASE .46% ASH FLOUR

Export flour trade was rather slow last week, with Great Britain the principal buyer. The U.K. took .46% ash, 10.75% protein straights on the basis of $4.18 f.a.s. Baltimore, net to the mill. The Netherlands East Indies purchased about 100,000 sacks of hard and soft wheat flours and Norway bought some small lots for Gulf shipment. Offers were sought on 30,000 sacks of 1% ash flour for Jamaica, part of it for March 15 shipment and the remainder for April 1. The Production and Marketing Administration was expected to be in the market shortly for 250,000 sacks of flour for Greece, and the Chicago Quartermaster Purchasing Office was seeking bids on 77,750 sacks of hard wheat flour for export, with bids to be awarded March 22.

SOUTHWESTERN SALES DECLINE

Sales in the Southwest averaged 36% of capacity, compared with 47% the previous week and 19% a year ago. Export and government business kept the volume from taking a sharper cut. Business with the bakery trade last week was largely on an immediate shipment basis, as discounts are not possible for deferred shipment sales. On several days about 80% of the sales were for shipment within a week. No round lot sales were reported, with few for more than 3,000 sacks completed. An eastern chain baker bought a few small lots and other chains proceeded on price-date-of-shipment schedules which were set up recently. Family flour business was slow. Unfilled order balances declined, with most mills in a position to run between 18 and 28 days.

SPRING MILLS' SALES REDUCED 80%

Sales by spring wheat mills averaged 31% of capacity last week, compared with 158% the previous week and 120% in the corresponding week last year. There was no inquiry for future bookings of flour as buyers continued to purchase only necessary nearby requirements while waiting out the market. Stronger prices served to increase the resistance to bookings. Shipments and operations declined slightly from the previous week, with directions considered about average. Few new sales of family flour were made, although directions on this type improved somewhat. The balance of unfilled orders on mills' books represents about 30 days' running time.

FLOUR BOOKINGS LIMITED IN EAST

Buyers in the metropolitan New York area were indifferent to new flour contracts, and only a small volume of business was conducted. Active buying the previous week filled nearby needs, and bakers showed no interest in booking unless another drop in prices occurs. Some chain bakers are covered through April, with some purchasing done on a price-date-of-shipment basis. Shipping directions slowed as the end of the coal strike removed concern of a railroad tie-up. Extreme caution in booking flour was noted at Buffalo, with buyers continuing to limit their inventories to nearby needs. Shipping directions improved, and contracts are rapidly being liquidated.

Trading at Philadelphia was slow, and many think it will continue at such a pace for some time since a number of bakers are fairly well supplied following purchases under recent price concessions. Large bakers were reported holding off while they made further tests of market strength. Light buying was attributed partly to slow retail sales, but settlement of the coal strike was expected to boost business. Business continued very dull at Boston, with buyers contracting for just enough flour to keep their inventories workable. Bullish news from wheat producing areas failed to change their ideas concerning flour price levels. Flour demand improved at Pittsburgh but not to the extent anticipated following the settlement of the coal strike. Commitments were made for 30 days in most cases, with 60 days the limit.

CENTRAL STATES SALES REDUCED

Sales at Chicago were at a minimum, with bakers continuing their resistance to prices and taking only fill-in amounts. The bakery engineers convention contributed to the lack of business. Shipping directions were fair to good. Family flour sales, also confined to small lots, declined. At St. Louis, mills reported new sales as generally good. Shipping directions on soft wheat flour were very good, and hard wheat flour directions have improved since the coal strike ended. Central states mills reported that bookings were disappointing, with buyers holding off in the belief that they can obtain better prices later.

VOLUME IMPROVES IN PACIFIC N.W.

Improved flour demand was reported at Portland as wheat prices advanced under the influence of large export sales of wheat. Most buyers had allowed their inventories to dwindle and thus felt they must book before wheat costs advance further. Export business in flour remained slow in the entire Pacific Northwest. Sales to the Philippines have been held up while the government there sets up an import quota system. At Seattle, the flour trade was reported slow again, with buyers still watching for a price decline.

SOUTHERN BUYERS RESIST PRICE GAIN

Flour buyers in the South resisted the price advance resulting from a stronger wheat market, and sales volume for the week declined. Most business at New Orleans was on a prompt shipment basis, with hard winters getting the largest share of interest. Sales of soft wheat flours improved slightly among cracker and cookie bakers. Shipping directions are about normal for the season.

Detailed reports of sales activity in the principal flour markets in the U.S. will be found on page 29.

Macaroni Manufacturers Continue Cautious Semolina Buying Policy

The policy of fill-in buying persists among manufacturers of macaroni and noodle products. Sales of durum granulars and semolina last week were scattered and for relatively short-term needs.

Meanwhile, demand for macaroni and noodles improved considerably as wholesalers replenished inventories to satisfy increased Lenten consumer requirements, eastern trade sources reported. Manufacturers, however, apparently are fairly well stocked with semolina or have sufficient amounts booked, as the larger outlet for their products has not been reflected in increased bookings with mills.

Buying this year is more inclined toward the hand-to-mouth pattern than usual as macaroni manufacturers appear to have less confidence in price levels.

Quotations on standard semolina March 13 at $5.85@5.90 were unchanged from the previous week. Meanwhile, cash durum wheat prices advanced almost 3¢ during the week as the May future advanced. The premium for fancy milling quality durum remained at 12@13¢ over the May future. Receipts of durum wheat were sharply reduced at Minneapolis as blizzards tied up rail transportation from North Dakota.

Durum wheat prices delivered at Minneapolis, March 11, were as follows:

Fancy 1 Hd. Amb. or better	$2.34⅝@2.35⅝
Choice 2 Amber or better	2.29⅝@2.33⅝
Choice 3 Amber or better	2.24⅝@2.27⅝
Medium 2 Durum or better	2.23⅝@2.30⅝
Medium 3 Durum or better	2.19⅝@2.23⅝

DURUM PRODUCTS OUTPUT

Durum products output as reported to The Northwestern Miller by mills representing approximately 100% of the total U.S. durum capacity, in sacks with comparisons; percentages of capacity based on six-day week:

	No. mills	5-day wk. capacity	Wkly. production	% of capacity
March 5-11	10	222,000	164,833	74
Prev. week	12	255,600	*201,184	79
Year ago	12	260,100	179,635	69

	Crop year production
July 1, 1949-March 11, 1950	6,824,171
July 1, 1948-March 12, 1949	6,844,686

MILLFEED VALUES DECLINE FROM PEAK

Bran Down $2.50, Middlings and Red Dog Off $1; Buying Interest Good

Millfeed is quoted lower this week, although the market is considered basically strong because of good buying interest and supply about equal to the demand. Bran is $2.50 lower, while other types are down $1 ton. The decline occurred following a sustained climb over the past few weeks.

Formula feed business was showing signs of picking up in the Southwest last week. Broiler feed demand was improving, hog feed demand was unusually good, and chick and turkey starter business was beginning to expand in southern areas where production is getting under way.

Some mills reported that this week's sales volume was the best of the new year. Others did not describe the week's volume in such glowing terms, but most manufacturers were showing more optimism over business.

The index of wholesale feedstuffs prices for the country as a whole, compiled by the Production and Marketing Administration, stood at 210.9 as of March 7, up 4.4 points for the week. The feed grain index was 187.6, up 2 points.

Broiler meat values have passed the 30¢ mark in the Arkansas area, an improvement of over 10¢ lb. in the past few months. This is giving producers more confidence in the market, and a heavy volume of broilers is being started this year. Egg feed sales are fair to good.

Hog feed sales continue to be in good volume and strong sales programs last fall and early this spring are beginning to show results. Dairy feed business is fairly active, and shipments of cattle feed are holding up quite well.

Formula feed business in the Northwest continues fair to good, with some manufacturers reporting a slightly better volume for the week as compared with last week and others noting a slight decline in sales. The outlook, generally, is considered good.

Sales of chick and turkey poult feeds continue to lead other types, although the heavy buying period is delayed somewhat this year. Hog feed sales remain slow, although one manufacturer reported a slight pick-up in demand from the Iowa territory, indicating a possible expansion of this type of business in the near future.

Most plants in the area are running at full schedules five days a week, 16 hours a day, and business so far this month compares favorably with the level during the comparable period in February for most concerns.

Millfeed production by mills in the Northwest, the Southwest and at Buffalo, representing 75% of the combined flour milling capacities of those areas amounted to 48,217 tons last week, according to figures compiled by The Northwestern Miller. Production for the current week compares with an output of 49,827 tons in the week previous and 47,154 tons in a similar period a year ago. Crop year production to date totals 1,838,874 tons as compared with 2,048,136 tons in the corresponding period a year ago.

Old Crop Wheat Futures Gain; Deferred Months Off

Large Export Sales, Prospects of Moisture in Southwest Influence Values; Cash Wheat Tightly Held

Wheat prices continue strong, with wide variation noted in changes from last week because of developments affecting values at the principal markets. All futures contracts reached new peaks for the season during the past week, and cash wheat values generally maintained the same relationship to the futures. The Chicago March future was under heavy upward pressure, and quotations shot up 7¢ during the week. Sales of reserve stocks of soft red wheat in the Chicago area, coupled with heavy short covering, apparently caused the advance. All May futures showed gains, ranging from 1⅛@3⅛¢ at the various markets, and July futures also advanced to a lesser degree. Deferred futures showed net declines as prospects for moisture in the Southwest appeared better.

Closing quotations for wheat futures at leading markets March 13 were: Chicago — March $2.31⅛@2.31¾, May $2.19⅛@2.19⅜, July $1.96¾@1.96½, September $1.96⅝, December $1.99⅛; Minneapolis—May $2.22⅝, July $2.15⅛, September $2.01⅛; Kansas City—March $2.25⅛, May $2.15⅝, July $1.93, September $1.93⅞.

Exports Up Sharply

Improved export sales and resulting hedge lifting was mainly responsible for old crop futures advances last week, while more confidence in winter wheat prospects served to curb the strength in new crop contracts. Sales of wheat for export were estimated at about 8 million bushels, including cargoes to Italy, the U.K. and Portugal and substantial quantities to Mexico. The total was said to include about 2 million bushels of soft red wheat, some of it to come out of storage at Chicago, with the bulge in the March delivery there resulting.

Earlier in the week a series of bad crop reports from the Southwest spurred new crop values. The official state crop reports published in midweek emphasized the more serious threats to the winter wheat crop from soil erosion and insects. The Kansas crop badly needs moisture to prevent blowing of soil, and the green bug infestation in Oklahoma was classified the worst since 1943. Later, however, there was scattered precipitation over sections of the dry area, and prospects were considered good for more moisture. The March U.S. Department of Agriculture crop report stated that the winter wheat crop came through February with little damage and is in mostly promising condition. Relatively early spring growth this year could result in losses because of vulnerability to severe weather, the report pointed out.

Meanwhile, cash wheat values in the Southwest topped the loan level plus accumulated charges, but marketings did not pick up substantially. Prospects for the new crop seem to be having a strong influence on producers in deciding whether or not to remove their wheat from the loan pledge. In the Northwest blizzards reduced receipts at Minneapolis.

Spring Premiums Steady

Premiums on cash wheat at Minneapolis were entirely unchanged, with virtually all grades and proteins trading the same as the week before as compared with the futures. Receipts were very light as blizzardy weather conditions again interfered with movement. Minneapolis received only 528 cars and Duluth 462. Ordinary protein No. 1 dark northern spring wheat was still quoted at 4@5¢ over the Minneapolis May price. Twelve percent protein was quoted at 6@8¢ over May, 13% protein 7@10¢, 14% protein 11@14¢, 15% protein, 15@18¢ and 16% protein 19@23¢ over May. To arrive bids continued to run virtually at the spot trading basis, with buying interest on to-arrive lots especially good for movement via Duluth. Average protein content of the hard red spring wheat tested at Minneapolis during the week was 13.73% and the durum 13.05%.

The cash durum market was steady to somewhat firmer. Although demand was not very aggressive, offerings were light and the limited number of cars offered for sale from day to day tended to hold the situation steady more than any activity in the demand. No. 1 and 2 hard amber durum, fancy milling quality, was quoted at 12@13¢ over the May price, No. 1 and 2 amber durum, choice milling quality, 7@11¢ over, and No. 1 and 2 durum, medium milling quality, 1@8¢ over. No. 1 red durum nominally called 10¢ under.

The following table shows the approximate range of cash spring wheat values at Minneapolis March 11:

For Dry Sound Wheat

1 DNS or NS 58 lb.	[illegible]
12.00% Protein	[illegible]
13.00% Protein	[illegible]
14.00% Protein	[illegible]
15.00% Protein	[illegible]
16.00% Protein	[illegible]

1¢ Premium for Heavy

Grade Discounts

Test weight—1¢ each lb. to [illegible] lb.
Damage—1¢ each 1 to [illegible]% over [illegible]%.

K. C. Cash Stronger

Kansas City cash wheat last week reached an equivalent of the loan level plus the 7¢ farm storage charge as stipulated by CCC, but the advance in prices failed to bring out any appreciable amount of selling by producers. Thus supplies remained relatively scarce at this market and not much change in cash premiums occurred during the week. The net result was a decline of ½¢ bu. in all protein categories, but this was more than offset by an advance of 3½¢ by the basic May future. This future opened the week at $2.12, reached a high of $2.15⅝ March 13 and closed at $2.15⅝. Premiums for ordinary No. 1 dark and hard winter wheat rose to 11½@14¢ over the May, but closed March 13 at 11@13¢ over. The 12% proteins closed at 11@13½¢ over and 13% protein was 11@15¢ over. Mill demand for wheat improved each day, but died down considerably over the week end.

The following table shows the approximate range of cash wheat prices at Kansas City, March 11, protein content considered:

No. 1 Dark and Hard	[illegible]
No. 2 Dark and Hard	[illegible]
No. 3 Dark and Hard	[illegible]
No. 4 Dark and Hard	[illegible]
No. 1 Red	[illegible]
No. 2 Red	[illegible]
No. 3 Red	[illegible]
No. 4 Red	[illegible]

At Fort Worth ordinary No. 1 hard winter wheat was reported selling March 13 at $2.47@2.48, delivered Texas common points, with 13% protein at 1¢ premium. Offerings are light, with demand fair.

More activity in wheat trading in the Pacific Northwest was shown last week than in months. Both exporters and millers were out after wheat, and prices rose up to $2.25½@2.26 bu., basis Coast, bulk, for ordinary soft white wheat. A total of approximately 30,000 tons of wheat was sold in export last week. Early in the week Norway took 4,000 tons of hard red winter wheat, and the U.K. took a full cargo of western white wheat. Both were for immediate shipment. Overnight March 9 sales of 15,000 tons of white wheat were reported sold to Italy, for April-May shipment.

Commodity Credit Corp. reentered the market and was willing to take wheat at $2.22 bu., f.o.b. track, or $2.25 f.o.b. ship. But the first day produced nothing, and it is likely that nothing will be turned over as long as excellent export prospects prevail.

CURRENT FLOUR PRODUCTION

★ ★ ★ ★ ★

A Statistical Service Provided Continuously for Readers of The Northwestern Miller for More Than Half a Century

WEEKLY FLOUR PRODUCTION, IN SACKS (CWT.)

Flour production in principal manufacturing areas by mills reporting currently to The Northwestern Miller, with relationships of production to capacity and to the total estimated output of all mills in the U.S. expressed in percentages:

	Mar. 5-11, 1950	*Previous week	Mar. 6-12, 1949	Mar. 7-13, 1948	Mar. 9-15, 1947
Northwest	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southwest	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Buffalo	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Central and Southeast	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Pacific Coast	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Totals	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Percentage of total U.S. output	[illegible]	[illegible]	69	69	67

*Revised.

	Percentage of capacity operated in 6-day week: Mar. 5-11, 1950	Previous week	Mar. 6-12, 1949	Mar. 7-13, 1948	Mar. 9-15, 1947	Crop year flour production July 1 to March 11, 1950	July 1 to March 12, 1949
Northwest	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southwest	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Buffalo	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Central and S.E.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
No. Pacific Coast	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Totals	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SOUTHWEST

Kansas City

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

Wichita

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

Salina

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

[illegible] Representative Mills Outside of Kansas City, Wichita and Salina

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

CENTRAL AND SOUTHEASTERN

Mills in Illinois, Ohio, Michigan, Indiana, Kentucky, North Carolina, Tennessee, Virginia, Georgia and eastern Missouri:

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

NORTHWEST

Minneapolis

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

*Revised.

Principal interior mills in Minnesota, including Duluth, St. Paul, North Dakota, Montana and Iowa:

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

*Revised.

BUFFALO

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

*Revised.

PACIFIC COAST

Principal mills on the North Pacific Coast:

Seattle, Tacoma and Interior Washington Mills

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

*Revised.

Portland and Interior Oregon Mills

	6-day week capacity	Flour output	% activity
March 5-11	[illegible]	[illegible]	[illegible]
Previous week	[illegible]	[illegible]	[illegible]
Year ago	[illegible]	[illegible]	[illegible]
Two years ago	[illegible]	[illegible]	[illegible]
Five-year average			[illegible]
Ten-year average			[illegible]

MILLFEED OUTPUT

Production of millfeeds, in tons, for the current and prior two weeks, together with season total of (1) principal mills of Nebraska, Kansas and Oklahoma and the cities of Kansas City and St. Joseph; (2) principal mills of Minnesota, Iowa, North Dakota and Montana, including Minneapolis, St. Paul and Duluth-Superior; (3) mills of Buffalo, N.Y. Production computed on the basis of 72% flour extraction:

	Southwest*: Weekly production	Southwest*: Crop year to date	Northwest*: Weekly production	Northwest*: Crop year to date	Buffalo†: Weekly production	Buffalo†: Crop year to date	Combined**: Weekly production	Combined**: Crop yr. to date
Mar. 5-11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Previous week	[illegible]		[illegible]		[illegible]		[illegible]	
Two weeks ago	[illegible]		[illegible]		[illegible]		[illegible]	
1949	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1948	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1947	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1946††	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Five-yr. average	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

*Principal mills. **75% of total capacity. †All mills. ††[illegible]% extraction basis effective March 1 to Sept. 1, 1946 ([illegible] lb. millfeed accepted as yield of 100 lb. flour). ‡Revised.

Production Problems Discussed at Annual Meeting of Bakery Engineers

CHICAGO — Bakery production men, cereal chemists, representatives of management and allied tradesmen convened at the Edgewater Beach Hotel here last week to study the two-pronged problem of maintaining high quality in bakery products and at the same time reducing costs of production. The occasion was the 26th annual meeting of the American Society of Bakery Engineers March 6-9.

A complete report of the March 6 sessions of the meeting, including the election of new officers, appeared in last week's issue of The Northwestern Miller. Brief reports of the remainder of the sessions follow.

"Processing of foods, as we bakers do, carries with it an obligation to keep plants sanitary," said John A. Wagner, American Stores Co., Baltimore, Md., who spoke on the subject "A Bakery Engineer Looks at Sanitation." Mr. Wagner was introduced by Rowland J. Clark, W. E. Long Co., Chicago, who served as morning session chairman March 7.

"Besides being an obligation," Mr. Wagner stated, "sanitation is good business practice. It pays off in higher plant morale through high level working conditions and it gives the consumer the clean and attractive products she has a right to expect."

Mr. Wagner cited dozens of things to be watched around bakeries to prevent rodent and insect infestation and stated that plant sanitation must start with eagerness on the part of management and be carried down through the working personnel with unflagging interest and supervision. Every department of the bakery should have one employee appointed as a sanitation officer who will be held responsible for cleanliness in his unit, Mr. Wagner stated. These officers should be constantly on the alert to calk all cracks and crevices, fill in spaces in walls around pipes and other openings."

White bread, sponge and dough development was discussed by M. J. Swortfiguer, Kroger Co., St. Louis. Four phases were covered under the main heading: Sponge fermentation, dough mixing cycles, dough absorption and coordinating mixing time, and floor time and their effect on the finished dough.

Control of fermentation is a critical factor in maintaining constant quality, Mr. Swortfiguer pointed out. The uniform distribution of ingredients is also necessary, and is obtained by careful handling of the various factors in bread production listed above.

Mr. Clark interrupted his session and turned the chair back to Mr. Richter for the election of officers, then the final topic of the morning was presented, with Dr. Paul P. Merritt, Red Star Yeast & Products Co., Milwaukee, discussing variations in the effect of yeast quantities, yeast foods, salt, sugar, shortening, dry milk, diastatic malt, fermentation, mixing and proof time, citing illustrations developed from tests performed by Dr. Merritt and his assistants.

Chairman of the afternoon session March 7 was H. Alvin Meyer, Grocers Baking Co., Lexington, Ky. The first of four general subjects discussed during the session was rope and mold inhibitors as they affect bread flavor and dough fermentation and a comparison of inhibitory powers under various conditions. This discussion was presented by Elmer F. Glabe, Food Technology, Inc., Chicago.

Mr. Glabe pointed out that, after using full sanitation measures, the only real insurance a baker has against mold and rope is the use of a chemical inhibitor. Such inhibitors must be active against mold and rope organisms but must not be active against yeast organisms and must not add unwanted flavors to the finished product, he said.

The use of mold and rope inhibitors in the newly-introduced partially-baked products is even more important than in regular baked products, Mr. Glabe maintained.

The production of these partially-baked products was discussed in detail in a paper presented by William C. Roth, Purity Bakeries Corp., Chicago, who called the new technique a "revolutionary new process that may go far to reverse the declining consumption curve." The new products have "taken the country by storm," he reported, and their value lies in the fact that they reduce the time interval between the baker's oven and the consumer's table.

Processing, Distribution Problems

The processing and distribution problems of these products are completely different from those of normal products, Mr. Roth pointed out. He discussed formula suggestions for the partially-baked products, recommending that the new rolls should be made with a very rich formula, especially in eggs and shortening.

"There is no limit to the types and varieties that can be made with this new process," he said.

Rye bread production was the topic of a paper presented by Jack Tesch, Oswald Jaeger Baking Co., Milwaukee, who pointed out that rye breads offer a greater opportunity for variety than most other breads and can be developed into "premium" products.

Floor Types for Bakeshops

The fourth and final subject of the session was bakeshop floors. The selection, types and installation of floors was discussed by E. F. Sperling, Helms Bakeries, Los Angeles, and the care, treatment and maintenance of floors was the subject of J. B. Jassoy, Regan Bros. Co., Minneapolis.

Hardwood floors laid over a concrete slab have many advantages over straight concrete or tile in bakeshop operating rooms, Mr. Sperling stated. They are more costly, he pointed out, but from the standpoint of sanitation, comfort and appearance, are worth the difference. Tile or floor brick floors, however, have advantages in areas where frequent washing is required.

Mr. Jassoy's discussion dealt extensively with methods of reconditioning and maintaining existing floors in various parts of the bakery plant. Resanding and resealing will put old wood floors in good condition and proper waxing and buffing will maintain them for long periods of time. He cautioned against the use of strong cleansers and hot water on wood floors, recommending instead a milder detergent and light amounts of water.

Personnel Selection Outlined

The subject of personnel selection and evaluation kept a packed meeting room highly interested throughout the morning session March 8. Dr. Robert N. McMurry of the personnel consultant firm of Robert N. McMurry & Co., Chicago, led the bakers through a system of personnel recruitment which proved conclusively that this phase of the business can be exceedingly expensive if it is improperly handled. Dr. McMurry was introduced by Don F. Copell, Wagner Baking Corp., Newark, morning session chairman.

The afternoon session March 8, under the chairmanship of Earl B. Cox, Helms Bakeries, Los Angeles, featured discussions on the mechanical production of yeast-raised sweet goods, icings and doughnut production.

LeConie Stiles, Jr., Rush Ashbrook Bakeries, Seattle, spoke on the mechanical production of yeast-raised sweet goods.

Curt Michaelis, Basic Food Sales Corp., New York, said that the outstanding problem of the industry is that the housewife is the ultimate consumer and at the same time is the baking industry's competitor. Icings, he pointed out, promote sales and help to appeal to the housewife in "her own feminine way" with smart makeup. The makeup on sweet goods is the icing, he emphasized.

Ernest J. Roth, Joe Lowe Corp., New York, and W. Blair Lehault, Doughnut Corp. of America, New York, spoke on the mechanical production of yeast-raised doughnuts.

The filtration of edible fats and oils was discussed by Lloyd J. Fay, Cobb's Sunlit Bakery, Green Bay, Wis., as the final feature on the March 8 afternoon program.

"Bull Session" Held

The "bull session" held the evening of March 8 attracted a large attendance. J. M. Albright, American Bakeries Co., Atlanta, served as session chairman and the principal topic of discussion was personnel practices. Dr. McMurry returned to the convention floor to participate in this discussion.

The Rev. Laurence H. Hall, Portsmouth, Ohio, addressed the evening session on the subject of humor, providing a break in the serious part of the program.

Pies, Cakes Discussed

Pies and cakes drew the attention during the morning session of March 9 with Robert L. Lloyd, American Maize Products Co., New York, serving as session chairman.

Arthur Weybe, National Biscuit Co., New York, discussed the proper handling of raw materials for cake production as the first paper of the session.

Common pie production difficulties were discussed by James Henderson, Wagner Baking Corp., Chicago.

Pie fillings and faults encountered in their production were reviewed by Carl Denton, Farm Crest Bakeries, Detroit.

Final participant on the session program was Oscar McGee, American Molasses Co., New York, who discussed faults involved in producing angel food, sponge and layer cakes.

Cake Production Problems

Factors vital to the production of high quality cakes of all types received attention at the final session of the meeting the afternoon of March 9. Claude W. Lantz, Durkee Famous Foods, Chicago, acted as session chairman.

Frank R. Schwain, Procter & Gamble, Cincinnati, discussed the effect of temperature on cake quality. Proper cooling, he pointed out, is important in all phases of cake production.

Harry Brody, Swift & Co., Chicago, spoke on factors influencing the production of high quality pound and fruit cakes.

Following Mr. Brody's address, the meeting was turned over to the newly-elected officers.

COVERAGE OF ASBE MEETING

Coverage of the 26th annual meeting of the American Society of Bakery Engineers was handled by the following staff members of The Northwestern Miller: Wilfred E. Lingren and Frank W. Cooley, Jr., Minneapolis, and S. O. Werner and Don E. Rogers, Chicago.

LOUIS A. SCHILLINGER DIES AFTER OPERATION

NEW YORK—Louis A. Schillinger, account executive with W. A. Schautz, Inc., New York advertising agency, and well known in the baking industry, died March 13. He had undergone an operation in January and was thought to be recovering satisfactorily. Funeral services were scheduled for March 15.

Mr. Schillinger was active in the baking industry with the Gardner Bakeries, Inc., at Baltimore and Norfolk, and served as manager of the Baltimore plant of the General Baking Co. until 1930, when he resigned to become special representative for Standard Brands, Inc., New York. He retired from this connection Jan. 1, 1947, and was named to his position with the Schautz agency in April of that year.

He was active in baking and allied circles in New York and Baltimore and served various baking associations in many capacities. He was first vice president of the American Bakers Assn. for six years, a governor of the ABA for eight years and a member of the executive committee of the ABA and the American Institue of Baking. He was a member of the American Bakers Foundation. He served as president of the Potomac States Bakers Assn. in 1922-23 and has since been active in planning conventions of this group.

B. J. O'DOWD TO JOIN GOFFE & CARKENER, INC.

KANSAS CITY — Bernard J. O'Dowd will become associated with Goffe & Carkener, Inc., Kansas City grain firm, March 15. He has been operating as an independent broker for the past three years and has been specializing in soybeans. In his new connection Mr. O'Dowd will be engaged in general grain merchandising. He was associated with the Simonds-Shields-Theis Grain Co. in Kansas City for a number of years and later was vice president of the Moore-Seaver Grain Co.

1950 Convention Program Topics Scheduled by Operative Millers

KANSAS CITY — Discussions on pneumatic handling, dust collection, hidden infestation and bulk storage will constitute the main portion of the program which is being arranged for the 54th annual convention of the Association of Operative Millers in St. Louis, May 1-5.

Thus far about 10 topics and speakers have been assigned by the program committee for the 5-day meeting at the Hotel Jefferson. Members of the committee are R. K. Durham, Pillsbury Mills, Inc., Minneapolis, George J. Tesarek, Quaker Oats Co., St. Joseph, Mo., and George S. O. Smith, Flour Mills of America, Inc., Kansas City.

A motion picture, "Pneumatic Handling of Mill Stocks," which illustrates mill installations in Europe, will be presented by E. Roth, Buhler Bros. Mfg. Co. of Uzwil, Switzerland. Dr. R. T. Cotton, USDA, Bureau of Entomology and Plant Quarantine, Manhattan, Kansas, will discuss "Hidden Infestation in Grain, Its Cause and Prevention."

R. J. Bodman, president of Milling Engineers, Inc., Kansas City, will speak on "Bulk Flour and Feed Storage, Daylight Packing and Loading." The subject of bulk storage also will be discussed by a representative of the operatives, but the speaker has not yet been selected.

Prof. John M. MacKenzie, University of Minnesota, Minneapolis, will speak on "Dust Collection Studies II." A discussion of fire prevention to be illustrated by colored slides, will be given by M. V. Reagan, Atkinson Armature Works, Pittsburg, Kansas.

"Maintenance and Inspection of Dust Collection Systems" is the subject of a talk to be given by Dewey Robbins, Fisher Flouring Mills Co., Seattle, and past president of the AOM.

Dr. J. A. Shellenberger, head of the department of milling industry, Kansas State College, Manhattan, will speak on "Bran Thickness of Hard Red Winter Wheats," a study which is being conducted at the college. Effective personnel leadership is a topic which has been assigned to Charles Broaded, Fisher Flouring Mills Co., Seattle.

Donald S. Eber, executive secretary of the AOM, Kansas City, reported that reservations at the Hotel Jefferson are going fast and that all available suites have been taken. Over half of the single and double rooms are already reserved. A large machinery and equipment exhibit will be held in connection with the convention and 79 exhibit spaces have been sold.

An entertainment highlight of the meeting will be the Allied Trades Party which will take place on the evening of May 1. The theme of the party is "Meet Me in St. Louie, Louey," reminiscent of the 1904 St. Louis fair. A full schedule for the ladies is being planned.

BREAD IS THE STAFF OF LIFE

FARM POPULATION

In 1850, 70% of the U.S. population lived on farms. In 1950 only 18% live on farms.

BETTER FLOURS FOR BETTER BAKING
A Complete Flour Service
★ Hard Spring Wheat
★ Hard Winter Wheat
★ 100% Whole Wheat
★ Cake Flours
★ Pastry Flours
RUSSELL-MILLER MILLING CO.
MINNEAPOLIS 1, MINN.
Millers of Occident, American Beauty And Other Bakery Flours

ACME RYE
A HIGH QUALITY WISCONSIN RYE FLOUR
All Grades
FISHER-FALLGATTER MILLING CO.
WAUPACA, WISCONSIN

ALL YOUR FLOUR NEEDS from a Single Source
SPRING WHEAT • KANSAS WHEAT • SOFT WHEAT
"The Beardstown Mills"
BEARDSTOWN ILLINOIS

MADE-RITE
BIG 7
Superior Bakery Flours
KANSAS FLOUR MILLS CO.
KANSAS CITY, MO.

CARGILL
Agriculture

80 Years of Reliability
PILLSBURY'S BAKERY FLOURS

For Better Bags—Better Buy Chase
CHASE BAG COMPANY
General Sales Offices, 300 W. Jackson Blvd.
Chicago 6, Illinois
Coast-to-Coast Bag Service

FAMILY PATENTS
White Crest Red Crest
Cake and Pastry Flours
J. C. L.
Sponge Cracker Flour
The J. C. Lysle Milling Company
Leavenworth, Kansas

KELLY'S FAMOUS FLOUR
YES, KELLY IS FAMOUS
FOR GIVING THE BAKER WHAT HE WANTS — A FLOUR WHICH CONSISTENTLY MEETS HIGHEST, MOST RIGID BAKING STANDARDS.
The WILLIAM KELLY MILLING COMPANY
HUTCHINSON, KANSAS
Capacity, 3,000 Sacks Daily
Grain Storage, 1,000,000 Bus.

ROBIN'S BEST FLOUR
The ROBINSON MILLING COMPANY
SALINA, KANSAS

104 YEARS OF MILLING EXPERIENCE
PLUS MODERN LABORATORY CONTROL
ASSURES THE BAKER EXCELLENT RESULTS WITH:
HUMMER—Spring Hi-Gluten
LIBERTY—Short Spring Patent
BEST PATENT—Standard Spring Patent
LOTUS—Strong Spring Patent
STRONG BAKERS—First Spring Clear
CAKE and PASTRY FLOURS
RYE—White - Medium - Dark
GEORGE URBAN MILLING CO. BUFFALO N. Y.

Bakery Equipment Study Planned by Sanitation Standards Group

CHICAGO—The study of bakery equipment in regard to setting standards for sanitation will begin immediately, it was announced following the March 4 meeting of the Baking Industry Sanitation Standards Committee held at the Edgewater Beach Hotel here.

H. Edward Hildebrand, chairman of the committee on task groups, reported that five pieces of equipment would be included in the studies of the immediate future, and that five chairmen of subcommittees for this purpose had been appointed. Initial drafts of standards for these groups will be presented to the general committee at its next meeting in September.

There was a 100% attendance of task-group chairmen at the meeting, consisting of: Morris Cohen, chairman of the flour equipment group; E. F. Sperling, mixers horizontal group; Charles Steiger, mixers vertical group; A. S. Schmidt, proofers group, and Carl Bornman, dough trough group.

A. J. Faulhaber, reporting for the committee on the appointment of consultants from public and private agencies, announced that the Food and Drug Administration has appointed George P. Larrick to the committee and that the U.S. Public Health Service has appointed A. W. Fuchs. Appointments from two other groups, the American Public Health Assn. and the National Committee of Food and Milk Sanitarians are expected to be announced soon.

The report on budget, staff and procedure was given by Dr. Edward L. Holmes, chairman of this committee. It was recommended and approved that a budget of $22,500 for three years be adopted. For the immediate present, a budget of $2,500 was set up for secretary and office expenses.

To facilitate the work of the various task groups, it was decided that each group would consist of a chairman, a representative of the bakers, a representative of Bakery Equipment Manufacturers Assn., a liaison man from the national committee and a professional sanitarian. The chairman of each group will choose committee members.

Allan T. Prosser, chairman of the general committee, presided at the meeting, and the following members were in attendance:

Representing the American Bakers Assn.: Arthur G. Hackett, H. Edward Hildebrand and A. T. Prosser.

American Institute of Baking: L. E. Caster, Howard O. Hunter and Dr. Edward L. Holmes.

American Society of Bakery Engineers: D. F. Copell, A. J. Faulhaber and Tyler Stevens.

Associated Retail Bakers of America: Walter M. Jennings.

Bakery Equipment Manufacturers Assn.: T. F. Freed, C. W. Steinhauer and Raymond J. Walter, recording secretary of the committee.

Biscuit and Cracker Manufacturers Assn.: J. Lloyd Barron.

—BREAD IS THE STAFF OF LIFE—

THOMAS E. KELLEY HEADS DREW FEED DEPARTMENT

NEW YORK—E. F. Drew & Co., Inc., New York, announces that Thomas E. Kelley has joined the company as manager of its newly formed feed department.

From 1932 to 1941 Mr. Kelley was employed by a leading Japanese import and export organization, handling trade in feeding ingredients as well as inorganic chemicals. After the outbreak of the war and prior to the three years of military service, he was with both Commercial Credit and Office of Lend Lease Administration.

Upon discharge from the army, he was with the Wilbur-Ellis Co. and for three years handled its feed department in New York.

—BREAD IS THE STAFF OF LIFE—

PLANS NEW ELEVATOR

FAIRVIEW, OKLA.—The Farmers Cooperative Assn. in Ringwood recently voted to build a new elevator with a capacity of 100,000 bu. With the construction of the Ringwood elevator and the one now under construction at Orienta, plus the elevator which was completed last year by the Johnston Grain Co., at Fairview, Major County will have 600,000 bu. additional grain storage. The Orienta elevator, which is being built by a farmers cooperative association, will have a total capacity of 335,000 bu. when completed, including the old part of the elevator which has a capacity of 85,000 bu. The new tower will be completed around April 1.

American Ace
—A superior bread flour, milled in one of the West's very finest flour mills.
American Flours, Inc.
NEWTON, KANSAS

"Hunter's CREAM"
The Oldest Flour Brand in Kansas
that for more than seventy years has stood at the very top of the fine quality list.
The Hunter Milling Co.
Wellington, Kansas

DOBRY'S BEST
and
BEST OF THE WEST
DOBRY FLOUR MILLS, Inc.
YUKON, OKLAHOMA

THE ROSS MILLING CO.
Choice Quality Flour
Plain and Self-rising
OTTAWA KANSAS

An EXTRA HOUR OF DOUGH STABILITY with WISDOM BUN-SUPER FLOUR
A new development which greatly extends fermentation tolerance. Provides more time for "cutting over" or giving dough extra punches. If you want a flour which will stand abuse, write or wire
NEBRASKA CONSOLIDATED MILLS COMPANY
1521 N. 16th St. OMAHA, NEBRASKA

"Gooch's Best"
SUPERIOR QUALITY
to Make All Baked Things Better
Gooch Milling & Elevator Co.
Lincoln, Nebraska

DAVIS-NOLAND-MERRILL GRAIN CO.
KANSAS CITY · · MISSOURI

Mother Hubbard Flour
FOR QUALITY FLOUR AND ECONOMY
Hubbard Milling Co.

King Milling Company
High Grade Michigan Soft Wheat Flour, Plain and Self-Rising
Successful Millers for Fifty Years
LOWELL, MICHIGAN

"RUSSELL'S BEST"
"AMERICAN SPECIAL"
Our mill is located in the high protein wheat district of central western Kansas, and secures most of its wheat directly from growers.
RUSSELL MILLING CO., Russell, Kansas

The Williams Bros. Co.
Merchant Millers KENT, OHIO, U. S. A.
Specialists Ohio Winter Wheat Flour
All our wheat is grown on "Western Reserve" and bought from the growers at elevators we own and operate.

KING MIDAS FLOUR
Pv
KING MIDAS FLOUR MILLS
Minneapolis, U. S. A.

Pfeffer Milling Company
Manufacturers of Pure High Grade Winter Wheat Flour
Brands: Lebanon Bell, Flake White, Fluffy Ruffles
LEBANON, ILL.
Member Millers' National Federation
Capacity: 1,500 Sacks Daily

Soft Winter Wheat Flours
Family - Commercial
Export
Long Distance Telephone 31
Cable address — "Jason"
J. Allen Smith & Co., Inc.
KNOXVILLE 6, TENNESSEE

"DURAMBER"
SEMOLINA
FANCY No. 1
Milled from Carefully Selected
AMBER DURUM WHEAT
AMBER MILLING DIVISION
Farmers Union Grain Terminal Association
St. Paul, Minnesota

IT'S BIN AGED
Flour from this mill comes to you fully aged — ready to use
ATKINSON MILLING CO
MINNEAPOLIS, MINNESOTA

The Standard Others Strive to Reach
WHITE SWAN
FLOUR
SPRINGFIELD MILLING CORPORATION
MINNEAPOLIS • MINNESOTA

STANDARD MILLING COMPANY
Millers of
• CERESOTA • ARISTOS
BAKERY FLOURS

CHARLES H. KENSER
Member Omaha Grain Exchange
MILLING WHEAT
MILLFEED • FLOUR
440 Omaha Grain Exchange
OMAHA, NEBRASKA

We specialize in designing and engraving for Millers and the Grain Trade
Holland Engraving Co.
Kansas City, Missouri

I-H
QUALITY MILLED FLOURS
Ismert-Hincke Milling Co.
Kansas City, Mo.

Baking Firms Report Decreases in Sales, Income

Sales and net income figures for six large chain baking companies for the year 1949 showed decreases from comparative figures for the previous year, with a single exception. The exception was the 1949 sales record of Campbell Taggart Associated Bakeries, Inc., which reported a new high for sales in the history of the company with an increase of 4¼% in bread tonnage.

Even with this new record of sales, the Campbell Taggart net income for 1949 dropped below that for 1948. The other five baking companies—Continental Baking Co., General Baking Co., Interstate Bakeries Corp., Purity Bakeries Corp. and Ward Baking Co. —all reported decreases in both sales and net income for 1949, as compared with figures for 1948.

Companies with operations serving the New York metropolitan area were unanimous in citing the 21-week strike affecting baking plants in that area as the principal cause of the reduction in 1949 profits and sales, as compared with 1948 figures.

Comparative 1949 and 1948 sales and profit figures for the six companies follow:

CAMPBELL TAGGART

1949	Sales	$85,048,518
1948	Sales	82,831,254
1949	Net	7,357,505
1948	Net	8,003,473

CONTINENTAL BAKING CO.

1949	Sales	$154,290,443
1948	Sales	161,238,774
1949	Net	5,543,196
1948	Net	7,678,101

GENERAL BAKING CO.

1949	Sales	$105,953,757
1948	Sales	110,540,699
1949	Net	3,067,974
1948	Net	4,094,363

INTERSTATE BAKERIES CORP.

1949	Sales	$55,767,632
1948	Sales	58,724,649
1949	Net	2,349,272
1948	Net	2,436,543

PURITY BAKERIES CORP.

1949	Sales	$67,249,163
1948	Sales	74,582,945
1949	Net	2,921,812
1948	Net	3,963,782

WARD BAKING CO.

1949	Sales	$86,790,763
1948	Sales	86,972,667
1949	Net	3,172,902
1948	Net	3,683,443

—BREAD IS THE STAFF OF LIFE—

DOBRY FIRM APPOINTS NEW REPRESENTATIVE

YUKON, OKLA.—The Dobry Flour Mills, Inc., Yukon, has announced the appointment of John E. Koerner & Co., New Orleans, as exclusive representative for Louisiana and southern Mississippi.

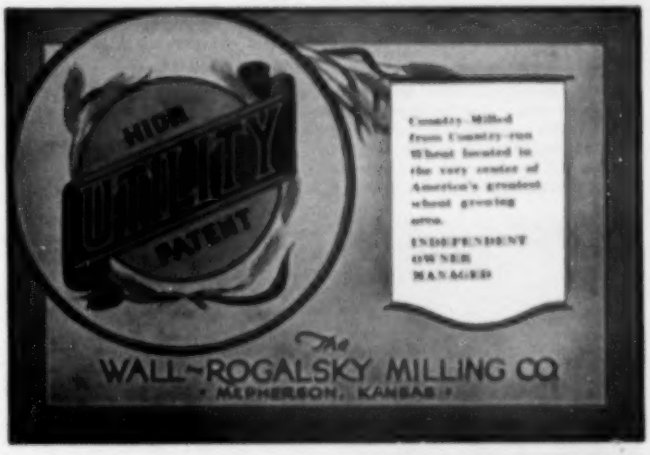
—BREAD IS THE STAFF OF LIFE—

PAYMENT PLAN SET

NEW ORLEANS, LA.—The Mississippi Shipping Co., New Orleans, has announced that it will accept freight payment in cruzeiros in Brazil on shipments to Brazil for which letters of credit were not issued prior to March 1, 1950. A 12% premium on freight and charges will be assessed in such circumstances.

STRATEGIC LOCATION

ACME-EVANS COMPANY
INDIANAPOLIS, IND.
Over a Century of Milling Progress
• *Since 1821* •



"ROCK RIVER" RYE "OLD TIMES" BUCKWHEAT
"BLODGETT'S"
RYE
All Grades—From Darkest Dark to the Whitest White
—Specially Milled by the Blodgett Family—Since 1848
FRANK H. BLODGETT, Inc., Janesville, Wisconsin

Exceptional Bakery Flours
TWELVE-40 NO-RISK PLA-SAFE
THE ABILENE FLOUR MILLS CO.
ABILENE, KANSAS
Capacity 3,000 Cwts. Daily *Grain Storage 1,000,000 Bus.*

MILLING ENGINEERS, INC.
Designers and Builders for the Grain Processing Industries
1911 Baltimore • Kansas City, Mo.

WOLCOTT & LINCOLN, Inc.
GRAIN MERCHANTS
Operating:
Chicago Great Western Elevator, Kansas City
Wolcott & Lincoln Elevator, Wellington, Kansas
Main Office: KANSAS CITY, MO.
Board of Trade Building

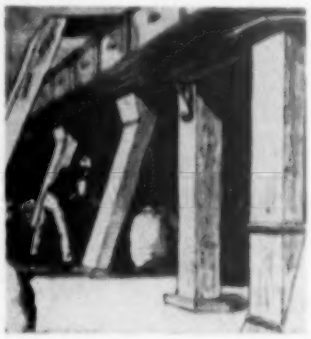
. . . . . Looking Backward

into the Files of The Northwestern Miller . . . .

75 Years Ago:

At the annual meeting of the Millers Association of Missouri, held in St. Louis, a millers' state insurance company was formed, following a plan in operation in Illinois, Iowa and Kansas.

At a meeting of Iowa millers in Davenport there was intense discussion of the question "of shipping flour exclusively to Baltimore, or some other port, so as to decrease the present surplus and create a larger demand." A committee which had visited Baltimore, reported in favor of shipping flour to one house at a certain port in place of the "desultory" shipments currently being made. It was proposed that a shipping association be formed.



Wooden Spouts in a Mill of Three Quarters of a Century Ago

It was reported that the total number of barrels of flour made in Minneapolis during the year 1874 was 1,472,000 against 824,000 in 1873, and only about 488,000 in 1872, "showing an increase that has no parallel in the history of milling."

50 Years Ago:

Hon. J. D. Bowersock of the Bowersock Milling Co., Lawrence, Kansas, was pushing a bill to establish a U.S. mint in Kansas City, Kansas, and a sub-treasury in Kansas City, Mo.

E. O. Stanard of St. Louis, former lieutenant-governor of Missouri, was being spoken of as a Republican candidate for vice president, to run with William B. McKinley.

A. C. Loring, who had been western manager for United States Flour Milling Co. (legendary milling "trust") had resigned to devote himself to the affairs of the Northwestern Consolidated Milling Co. in Minneapolis.

There was compassionate reference to the great hurricane in Galveston which resulted in the loss of about 4,000 lives.

25 Years Ago:

B. W. Marr of the Gwinn Milling Co., Columbus, Ohio, became chairman of the board of the Millers National Federation.

Julius H. Barnes, who had been head of the U.S. Grain Corp. in World War I, denied unofficial charges that his company had a corner on wheat.

Lewis H. Hale of Ionia was elected president of the Michigan Millers Assn.

B. W. Dedrick, head of the Pennsylvania State College School of Mill Engineering, began a series of articles in The Northwestern Miller on problems of flour mill construction, equipment and operation.

Dr. William M. Jardine, who had been considered for the presidency of the Millers National Federation when that organization placed its direction in the hands of a paid executive (the late Sydney Anderson), became secretary of agriculture.

Russia was importing large quantities of flour for famine relief.

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WHAT MILLERS USED TO EAT— Convention banquets in the flour milling industry were not frugal in the mauve decade—which is to say the gay nineties. Nor were the social aspects of conventioning austere. We offer in evidence these paragraphs from The Daily Northwestern Miller of June 20, 1890 (yes, it was a many-paged daily publication in full format for the period of the gathering, which was that of the Millers National Assn., ancient forerunner of the Millers National Federation; place, Minneapolis):

"The West Hotel was alive with millers last evening bent upon ending the gay festivities of convention week in paying homage to the deity who rules over one's appetites. The vast dining hall was crowded as much as comfort would allow, 550 people being seated at the five tables that ran the entire length of the dining room from east to west.

"It was about 9.30 before the crowd began to stream into the dining room, and 10 o'clock before all were seated and the first course served. At the head of the five long tables was placed the T table, at which were seated the officers of the association, Mayor Babb and other invited guests. Floral decorations were abundant, the design of the export flour bag, a gift to the association from H. & L. Chase of St. Louis, having the post of honor on the balcony at the west end. On the head table reposed a handsome center floral piece and also three large baskets of choice flowers. The five main tables were quite as richly decorated, and each window and radiator was filled with potted plants. The whole made a superb effect. . . .

"Danz's orchestra of 25 pieces, stationed in the hallway just outside, furnished a most enjoyable musical program. One hundred and fifty colored waiters saw to it that the wants of the inner man were supplied promptly, the menu being one of the finest the West Hotel has even been called upon to provide. There were four kinds of wine and a Reno Perfecto cigar. Here is the tempting

MENU

Consomme of Chicken en tasse
Soft Shell Crabs—sauce Tartar
Fried Fillet of Black Bass—sauce a la Matelotte Normandie
Sliced Cucumbers Pommes de Terre Parisienne
Tenderloin of Beef—sauce Perigord
Asparagus Tops
New Potatoes with Cream
Breast of Chickens a la Supreme
Imperial Punch
Broiled Quail on toast, Cresses, Currant Jelly
Lettuce and Tomato Salad
Roquefort and Stilton Cheese
Assorted Cakes
Ice Cream a la Nesselrode
Strawberries and Cream
Fruits Cafe
Cigars

"The design of the menu cards, exceedingly handsome souvenirs of the occasion, was in the nature of an accurate view of St. Anthony Falls and the mill district as a background out of which rose a sheaf of wheat, while in the foreground were the title words for the occasion. There were two cards, joined by a neat bow of satin ribbon, and on the back of the second card were the names of the various committeemen, who have aided in making the week a memorable one to visiting millers.

"The toast list was presided over by ex-President Greenleaf and was quite a long one, as follows:

1. Welcome by F. L. Greenleaf.
2. The Millers National Assn., the safeguard of the American Flour Maker. May its future history surpass its past achievements. Ex-President Bain.
3. The Export Trade—May the efforts being made by the miller and his friends across the water to increase and foster it be crowned with success. James Wilson of Glasgow.
4. Buffalo—Tapping our grain fields and stealing our thunder, she is our worst competitor and yet our strongest ally. A. B. James.
5. Boston—The hub of the eastern market.
6. The Ex-Millers—They will increase with the advent of the English syndicates; response by a gentleman who has striven to search for experience whether it is better to be or not to be a miller. Mr. D. McC. Reeve.
7. Philadelphia—The city of brotherly love, she manages to eat up a good deal of our flour, therefore is she called blessed. Mr. C. B. Woodman.
8. The mill furnishing trade. Mr. Howland of Buffalo.
9. New York City—Our Metropolis. May her produce exchange experience a change of heart and help us obtain a new bill of lading. Mr. D. T. Wade.
10. Dakota—The home of the blizzard and the cradle of our No. 1 hard. Mr. Hickes.
11. Illinois—The home of one of our distinguished fellow members who will respond to this toast. Mr. D. E. Sparks.

"The speeches were replete with wit and wisdom. At an early hour this morning the banqueters broke up, some joining the excursion to Duluth, and the others seeking their downy couches of ease."

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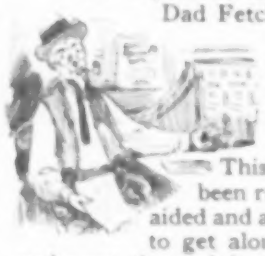
PLEASING PROSPECT

When on the brink of marriage, he
Devotes himself assiduously
To dreaming of the starry strata
And similar romantic data.

But now and then he finds digression
In contemplating a procession
Of coffee cake and rolls and pie
In that idyllic bye and bye!

Grace V. Watkins.



"The way some of these millers worries," said Old Dad Fetchit of the Fish River Roller Mills, "about there bein' more'n enough mills to make all the flour needed seems to me to be a heap like takin' on because there's a lot of ocean that ain't used regular by ships. This here mill, now, I allow ain't ever been run a night in sixty years an' yet it's aided and abetted three generations of Fetchits to get along somehow, an' as near as I can make out there ain't no cause to worry but what Young Bill will run it along pretty much the same as the rest of us has less'n maybe he builds a bigger one."

EDITORIAL

TAX-EXEMPTS ON THE SPOT

JUDGMENT DAY is moving nearer for the tax-exempts. These chickens will have to come home to roost ultimately from their lush pickings of recent years. They are very much involved in the 1950 revenue bill, which is going to be moulded in closed-door sessions of the House Ways and Means Committee during the next few weeks.

How close the revenue bill will hew to the specifications proposed by President Truman in his special tax message is at the moment almost anybody's guess. From the attitude of the committee during the hearings it may be assumed, however, that there will be very considerable variations, and it is known that the Senate has still further ideas of its own which will show up when it holds its hearings and offers its amendments a couple of months from now.

For instance, almost nobody of either party is satisfied with the administration's proposals that wartime excise taxes be cut by only some $650 million. Many members have expressed the feeling that a billion dollars of reduction would be more in line with what voters want, and with an election coming in November they will probably try to please.

Nor is there any general agreement with suggested methods of raising enough new revenue to replace the losses resulting from excise tax cuts. Both the President and the Secretary of the Treasury suggested that certain loopholes in the tax laws be closed, specifically naming the competitive commercial activities of educational and charitable institutions and the depletion allowances of mines and oil wells. They also urged increased taxes on big corporations and on estates and gifts.

The administration failed to include the loopholes through which cooperatives and other mutuals now escape taxation of business income, but both Ways and Means committeemen and many of the witnesses who appeared before them brought this matter up time and again until it became one of the dominant notes in the hearings.

Early in the sessions, when Secretary Snyder expressed the belief that colleges and foundations which engage in competitive business activities should be taxed, Chairman Robert L. Doughton gently chided him by observing: "I don't see how we can tax colleges and charities unless we tax the cooperatives at the same time." And on several other occasions, the elderly chairman worried that cooperative tax exemption was a problem that would have to be settled soon.

Two full days of the hearings were devoted exclusively to the cooperative tax matter. On Washington's Birthday, a dozen witnesses for businessmen's trade and tax organizations presented their case, bringing the committee up to date on the reasons why co-ops should be required to pay income taxes like competing companies. The next day, co-op witnesses told why they didn't want to pay.

On both days, the big committee room was filled with businessmen who had come to Washington from nearly 30 states to let the Congressmen know that they aren't fooling when they ask for tax equality.

Proponents of co-op taxation presented figures and facts showing how co-ops are continuing to grow with tax avoidance; how little co-ops quickly become big co-ops as they pile up untaxed earnings; why patronage dividends must be considered as taxable earnings; where government will get $1 billion of new revenue for excise tax reduction as soon as it taxes competitive business earnings of the tax-exempts.

Co-op representatives tried to minimize their big profits; argued speciously that since some regular corporations are bigger they ought not to be asked to pay taxes; declared, while businessmen in the audience shook their heads, that co-op competition was beneficent to Main Street.

On other days, witnesses from various colleges generally condemned university tax-exempt ownership and operation of factories, racetracks, airports and radio stations as unwarranted competition with taxpayers, but they condoned the sale and lease-back gimmick with which most of them were involved, as o. k. In similar fashion, the president of a company that has been criticized for its operations with charitable trusts found nothing wrong with his operations, but declared that cooperatives ought to be taxed.

Witnesses for mutual savings banks and building and loan associations, who came late to defend their tax-exemption, were eagerly pounced upon by various members of the committee, and by the end of their cross-examination their chances of being taxed appeared to be greatly enhanced.

Meanwhile, a new bill (HR 7343) "to equalize taxation by imposing income taxes on cooperative corporations and on the business income of certain other tax-exempt corporations and organizations," has been introduced by Rep. Clifford Davis (D., Tenn.). His bill embodies the British method of taxing corporate earnings. Co-op corporations would be required to pay full income tax on all their earnings, like other corporations, but farmer members would get deductible credit on their patronage dividends, applicable to individual income taxes. This would be a big advantage to the farmer. The bill is also a step toward elimination of double taxation of corporate earnings.

The Ways and Means bill will contain many of the technical revisions which were passed by the House two years ago. Major elements of controversy will be the size of excise-tax reductions and taxation of cooperatives. Nobody expects corporate taxes to be increased or depletion allowances to be lowered. Not many observers who are wise to political ways expect federal taxation of cooperatives this year. The best that can be hoped for, say the proponents, is that Congress will begin seriously "studying" the matter and that the demand for action will become continuously hotter.

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ALFRED FISKE PILLSBURY

SUCCEEDING to the responsibility for carrying on in his generation the great social and industrial traditions surrounding his family name, Alfred Fiske Pillsbury, whose death is recorded elsewhere in this issue of The Northwestern Miller, added to the luster of that name and to those traditions. He devoted the active years of his business lifetime to guiding the policy and supporting the continuing success of the great enterprise of which his father was co-founder.

Beyond the call of business duty, Mr. Pillsbury had the leisure, energy and interest for a collateral lifetime of devotion to civic, cultural and welfare activities in his community. And over and above all these things he developed a many-sided personality, some of the indexes of which may be found in the fact that he is remembered as one of the first great University of Minnesota football players, as one of the first automobile owners, as the first in Minneapolis to ride a high-wheeled bicycle, and as an art connoisseur distinguished for having brought together the western world's finest collections of Chinese bronze and jade. The world of art owes him gratitude for his generosity and for the many years he was the guiding spirit of the Minnesota Society of Fine Arts, and the world of music is similarly indebted for his official and personal support of the Minneapolis Symphony Orchestra.

To many people in his own community, Mr. Pillsbury was perhaps best known as an enthusiastic promoter of civic welfare and recreation. He was a member of the Minneapolis Park Board for many years. In the business and industrial world he had many interests and activities extending beyond the direction of his own company's affairs. Impelled as he was by family position and the force of his own personality to walk in prominent places, Mr. Pillsbury nevertheless contrived to be undramatic. His was a life rich in useful and influential experience—a life lived quietly and with no demand on his part for acclaim.

• • •

FARMERS ARE NOT DEFEATED

IT becomes increasingly clear that the only defeatism there is on the agricultural front is the defeatism that lies in the minds and policies of the present national administration. Here is the same tired acceptance of the false theory of last frontiers that was so popular among the early New Dealers. Remember all the talk of "mature economy"? No more opportunity, no place for farmers to go. All that could be hoped for was merely to divide up what was left—and supplement it with benefits from the public treasury.

The Redealers have nothing better to offer today. They have settled back upon the same tired defeatism. There is no longer any thought of merely meeting current emergencies in agriculture. The farm problem is accepted as permanent. Good farmers and bad farmers are to be taken as is. There is no idea of turning marginal farmers to better employment—the government merely would think up ways of perpetuating their inefficiency.

The tiredness and the defeatism are inherent in the Brannan plan, which would stabilize farm income, pressing good farmer and bad farmer into the same economic mold. It is the Brannan theory that there should be a floor under farm income. But the floor inevitably would become a ceiling. The tendency would be to treat the efficient no better than the inefficient. Agricultural production would become standardized on a relatively low level of efficiency, and individual initiative on the part of the farmer would be discouraged. The Brannan plan thus not only rejects the possibility of agriculture helping itself, but denies agriculture the opportunity of trying to help itself.

But this sort of defeatism, fortunately, does not dwell in the minds of American agriculture as a whole. We like to think that a pretty fair sample of agricultural opinion was present at the recent Farm Forum held in Minneapolis. This opinion frankly added heat to the hot potato scandal. It was strongly critical of the income support standard provided for in the Brannan plan. The Socialistic aspects of this innovation were clearly discerned, and the farmers who disclosed their views on this subject obviously did not like the sound of that word "Socialism."

True, it was not possible to hear any loud recommendation from the forum farmers for a cut in support prices. Farmers are human, and they have pocket nerves. They want to get all that's coming from the government pipeline as long as there's anything resembling money flowing through it. But they know the government can't go on piling up farm surpluses and paying out billions of dollars in the process. They know that there must be an end some time to all this. They are not deaf to the growing popular resentment against certain aspects of the farm program. They wisely fear that this resentment may go much farther than merely curing grave defects in the current program and that it may seriously injure some of the legitimate governmental aids to agriculture. Indeed, unless there is a speedy return to sanity from some of the worst of the crackpotism there is real danger that the public thumb will be turned down upon all farm programs.

CANADIAN TRADE COMMENT

By A. H. Bailey

TORONTO—It is expected that Canada will share in the increased allocation of 100 million bushels of wheat as a result of the inclusion of Germany and Japan among the importing members of the International Wheat Agreement. Canada's share is expected to be approximately 25 million bushels.

Even with an ironing out of American-Canadian difficulties the question of entry of Germany and Japan into the pact is far from settled. The other big issue is Britain's attitude to what she considers a threat to her sources of sterling wheat. Japan has been a traditional market for Australian wheat and within the limits of the wheat agreement would undoubtedly be bidding again for a goodly portion of the Australian quota.

Reports indicate that Britain is contemplating increased purchases from Australia to replace dollar wheat from Canada. It is expected that this aspect of the problem was discussed at the American-Canadian conference held in Ottawa last week and it is possible a common understanding may have been reached.

TO INVESTIGATE FLOUR COMBINE

The Canadian government has appointed Thomas D. MacDonald to administer the Combines Investigation Act. Mr. MacDonald, 41, a native of Stellarton, N.S., replaces F. A. McGregor, who resigned following disagreement with the government over delay to making public his report on an alleged combine in the flour milling industry, and will be assisted by A. S. Whiteley, assistant commissioner and another assistant yet to be named. The new commissioner has held the post of superintendent of bankruptcy in the Justice Department since last April and is a former deputy attorney-general of Nova Scotia.

$25 MILLION TO WHEAT BOARD

The Dominion government will pay approximately $25 million into the Wheat Board treasury before July 31 this year to cover payments for wheat under the British contract which have been deferred in order to provide for purchases of bacon, lumber and salmon. J. G. Gardiner, minister of agriculture, told the House of Commons in Ottawa March 8 that if any loss was taken by Canada on the deal it would be absorbed by the treasury and not suffered by western wheat producers.

Settlement with the British will be made later when the wheat contract books are finally closed and adjustment is made one way or the other in the light of the "have regard" clause, through which the British agreed to take account in the final years of the contract of the wheat sold in the earlier years below world price.

Mr. Gardiner defended the payment of an additional 20¢ bu. to wheat farmers last spring, which resulted in the wheat board ending the year with a $5 million deficit. The payment had been made, he said, at the insistence of the western farmers and that neither he nor C. D. Howe, minister of trade, under whose jurisdiction the wheat board operates, could have estimated within $4 million or $5 million what the total was going to be.

The overpayment by the Wheat Board will be charged against wheat sold this year to Britain and elsewhere and there will be no further payments until final settlement of the five-year pooling arrangement is made. This means that the western farmer will probably end up his five years of wheat selling with an overall price of little, if anything more than $1.75. In any event, the final payment is not expected to exceed $1.85, Mr. Gardiner declared.

SOFT WHEAT CROP UNDER CONTRACT

Despite the accumulation of surplus stocks of soft white wheat in Canada milling companies have indicated that this crop will definitely be grown under contract in southern Alberta again this year. The total acreage, however, will be sharply curtailed from that of 1949 and specific contract terms will not be fixed until late in March or early in April.

The reduction in acreage of soft white spring wheat which has become an important crop in irrigated areas about Lethbridge, Alta., has become imperative because of the surpluses of this pastry flour wheat and apprehension over future pastry flour prices is delaying the setting of contract terms for growers.

BREAD IS THE STAFF OF LIFE

E. B. FROST REELECTED

WINNIPEG — E. B. Frost, vice president of the western division of Ogilvie Flour Mills Co., Ltd., was reelected president of the Manitoba division of the Navy League of Canada at the annual meeting held here recently. H. E. Sellers, president of the Federal Grain, Ltd., is honorary president.

DAVID & FRERE STARTS CONSTRUCTION OF PLANT

MONTREAL—David & Frere, Ltd., Montreal, manufacturer of plain and fancy biscuits, has started construction of a new plant, at an estimated cost of over $1 million, which is expected to be in operation in the spring of 1951. Plans call for the building of an addition to this plant in three or four years to cost around $500,000 which will replace the plant now in use. Earnings for the current fiscal year, which ends March 31, 1950, are slightly better than for the same period of the past fiscal year. In the year ended March 31, 1949, the company had a net profit of $301,074.

BREAD IS THE STAFF OF LIFE

CANADIAN EXPORTS HIT 2,134,500 BUSHELS

WINNIPEG — Export business in Canadian wheat and flour last week totaled 2,134,500 bu. Of this total almost 1,733,000 was in the form of wheat, with the following amounts going to International Wheat Agreement countries: U.K. 1,180,000, Israel 4,500, Belgium 403,000.

Class 2 wheat sales were reported as follows: Honduras 4,500, U.S. 13,500, and Japan 78,000. Flour shipments were small, with IWA sales totaling 342,000 bu. going to the Philippines, Cuba, Trinidad, Bahamas, Belgian Congo, Haiti, Ecuador and the Dominican Republic. Flour sales to Class 2 countries totaled 59,000 bu. and were made up of small lots sold to Formosa, Ceylon, Costa Rica and El Salvador.

BREAD IS THE STAFF OF LIFE

LIVING COST UP

WINNIPEG — The Dominion Bureau of Statistics cost-of-living index increased from 161 to 161.6 between Jan. 3 and Feb. 1. This increase of .6 point followed an unbroken series of small declines totaling 1.8 points and dating from the August, 1949, peak of 162.8. The foods index advanced 1.9 points to 202.3 during January, and again largely determined the change in the total index. Increases in beef and lamb prices over-balanced decreases in pork, while increases were registered for eggs, oranges, coffee and sugar.

CANADIAN EXPORTS ABOVE '49 FOR 6-MONTH PERIOD

WINNIPEG—With six months of the current crop year gone export clearances of Canadian wheat and wheat flour to all destinations totaled 119,533,000 bu., or more than 18,000,000 bu. greater than the total cleared in the corresponding August to January period a year ago. For the current crop year, however, flour exports are lower. The above totals include 22,573,000 and 27,438,000 bu. in the form of flour, respectively.

January exports of Canadian wheat aggregating 11,000,000 bu. were roughly 400,000 bu. over the December total of 10,600,000, but fell short of shipments for both the same month last season of 14,400,000 bu., and the 10-year January average of 16,200,000 bu.

A total of 5,900,000 bu. Canadian wheat, according to the Statistics Branch of the Board of Grain Commissioners for Canada, has entered the U.S. so far this year, compared with 41,000 bu. for the same period of 1948-49.

Export clearances of Canadian wheat flour for January totaling 4,200,000 bu., were encouragingly higher than December loadings of 3,400,000 bu., and although below the January record of 6,200,000, set in 1947, exceeded the clearance for this month last year of 3,800,000 bu., and equaled the 10-year average.

Foreign shipments of Canadian coarse grains and flaxseed were generally down from December traffic.

This year's exports of rolled oats and oatmeal totaling the equivalent of 491,042 bu. oats, have been light in contrast with the 1,200,000 shipped during the first half of 1948-49, and this month's cargoes of 39,133 bu. fell further below the previous small monthly average of 90,382 bu.

BREAD IS THE STAFF OF LIFE

CANADIAN RAILWAYS GET 7.4% RATE INCREASE

WINNIPEG — A flat increase in rail rates of 7.4% was awarded the Canadian railways by the Board of Transport Commissioners. This was announced from Ottawa March 1, and the increases may be put into effect on 15 days' notice. The increase does not apply, however, to grain and grain products moving within Western Canada, which are exempt under the Crows' Nest Pass Agreement, a government statute. The only other exceptions are rates on coal and coke. For these commodities the board authorized an increase of 7¢ on top of 8¢ a ton awarded in September.

It is unofficially estimated that the increase in rates will return an additional gross revenue of $28 million annually.

The announcement of the increase has brought a flood of protests from all parts of Canada, but the increase has been granted and there is no suggestion that the increases will not be announced by the railways.

BREAD IS THE STAFF OF LIFE

WHEAT IN FAR NORTH SHOWS HIGH QUALITY

TORONTO—A pioneer farmer in the Peace River country made history this year by trucking 238 bu. high quality Reward wheat 205 miles south to the National Grain Co. elevator at Grimshaw, Alta.

The northern wheat, which was grown on a homestead north of the 58th parallel of latitude (almost 1,000 miles north of the Canadian-American border) weighed a strong 68 lb. bu. and yielded 48 bu. an acre.

Tests showed high protein content of 14.8%.

While Reward wheat is rust-susceptible, regions this far north have not yet been troubled with rust.

BREAD IS THE STAFF OF LIFE

CANADIAN MILLFEED OUTPUT DECREASES

TORONTO—In the six-month period of current crop year ended Jan. 31, production of millfeeds by Canadian mills amounted to 362,784 tons, compared with 377,388 tons for the same period a year ago.

Imports of millfeeds into Canada during these periods amounted to 2,600 tons and 5,556 tons, respectively. Exports amounted to 21,663 tons and 23,258 tons, and domestic disappearance accounted for 340,404 tons in the 1949-50 period and 363,133 tons in the 1948-49 period.

BREAD IS THE STAFF OF LIFE

Decline in Exports Worries Millers in Australia

LONDON — The major talking point in Australian flour milling circles at present concerns the recent dive in sales of flour to overseas markets.

In an effort to check the slide the federal minister of agriculture, John McEwen, has called a conference of topflight executives to discuss ways and means of stemming the depression in the industry and to formulate plans for meeting the problems facing the millers.

He attributes the fall in sales to two reasons: first the fact that mills in other countries, formerly large flour buyers, were now coming back into production, thus minimizing the need for imported flour; secondly, the low price fixed for by-products from flour mills in Australia placed the miller at a disadvantage when quoting to overseas buyers.

This latter statement confirms the opinions expressed by European buyers that Australian flour was too dear

in comparison with North American production despite the advantages offered by the acceptance of payment in sterling thus saving vital dollars.

The difficult position has been currently highlighted by an official of the Flour Mill Owners Assn. in Sydney, New South Wales, who revealed that many mills usually operating three shifts were not reduced to two or, in some cases, to one. Other evidence offered by expert observers indicates that 16 mills in Western Australia, which normally produced half the country's flour exports, were either closed or working part time while 25,000 tons of flour were awaiting shipment.

Mr. McEwen has also admitted that the failure of the Australian Wheat Board to come to terms with the British Ministry of Food has created a difficult situation in New South Wales milling circles.

One major customer to which the Australians were looking for an upsurge in trade was Japan, though the forecasted decision of the International Wheat Council to route most of the business to the U.S. and Canada will disqualify them from participation. The Japanese government recently announced that it plans to import 1 million tons of cereals up to June 30, 1950. Rice and wheat will, however, be interchangeable, the former being preferred within the limits of price and availability.

The Egyptian government has also provided some business for the Australian mills, a recent deal involving 50,000 tons of flour in addition to 55,000 tons of wheat. The Egyptians are reckoned to require 50,000 tons of grain over and above their allocation under the International Wheat Agreement.

Australia Faces Problem of Wheat Surplus

LONDON—Australia is reported to be facing some unusual difficulties in disposing of her current wheat surplus because of the failure to come to terms with Britain, hitherto a large-scale buyer.

Trade sources report that the British are holding back because they are confident that the current ample supply position will lead to a price slide in the near future. The new Australian crop is threshing out well, and elevators are reported to be bogged down with supplies. Meanwhile, negotiations between the British representatives and the Australian Wheat Board are continuing.

F. S. Teasdale, a member of the board, has stated that Britain is taking less Australian wheat at present because the U.K. has contracted to buy 140 million bushels of wheat from Canada under the Anglo-Canadian wheat agreement and also has commitments to buy U.S. wheat. He expected, however, that the prevailing difficulties would be rectified by the middle of the year and that the British orders would be placed by June.

Mr. Teasdale added that Australia has received substantial orders from Egypt, Norway and Sweden, while Finland also was a buyer. The failure of Russian supplies, following the breakdown in trade negotiations with the Soviet, is responsible for Finland's entry into the world wheat market. Negotiations have been proceeding in Moscow since November, 1949, and the inability to come to an agreement leads some observers to suppose that the 1949 Russian wheat crop was not as successful as the Russian officials indicated.

BREAK IN THE STAFF OF LIFE

WOODS CUTS DIVIDEND

MONTREAL—Directors of Woods Manufacturing Co., Montreal, have declared a quarterly dividend of 25¢ a share, payable March 31 to holders of record March 10. This is a 50% cut from the quarterly dividend previously paid and indicates that the stock has now been placed on an annual basis of $1 instead of $2. The $2 rate had been in effect since the payment of the quarterly dividend of 50¢ a share on Sept. 30, 1944. The company issued a statement to the effect that the decision to reduce the quarterly dividend from 50¢ to 25¢ was considered advisable in order to conserve the company's working capital at a time when earnings are subnormal and a program of improvement to the plant is being undertaken.

BREAK IN THE STAFF OF LIFE

CUBA REQUIRES FOOD LABELS IN SPANISH

WASHINGTON—All labels on food products sold in Cuba must be printed in Spanish after July 28, according to the U.S. Department of Commerce. The order was officially published Jan. 28.

Inasmuch as there is no provision in this decree requiring that food products in containers must have labels in Spanish at the time of importation, it would appear that the labels could be affixed in Cuba, either by the importer, wholesaler or retailer. However, Cuban officials advised the U.S. Embassy in Havana that the purpose of the government was to require that the Spanish labels appear on the goods when imported, as it did not wish to build up an inspection corps to enforce the decree through retail establishments.

BREAK IN THE STAFF OF LIFE

DROPPED FROM LIST

TORONTO — Marquis wheat has been dropped entirely from the list of recommended cereals for Alberta in 1950 as a result of the latest crop zonation committee findings. Marquis wheat had been only on the recommended list in Zone 1, southeastern prairie land of Alberta. Thatcher has replaced it to a large extent, and the acreage of Marquis has steadily declined from the 25% occupied in 1946. Elsewhere, Saunders wheat is favored by Alberta growers, along with Thatcher.

BREAK IN THE STAFF OF LIFE

R. N. LAUGHLIN ELECTED OFFICER OF CONTINENTAL

NEW YORK—R. N. Laughlin was elected a vice president of the Continental Baking Co. at a meeting of the board of directors March 9. Mr. Laughlin has been with the company since January, 1927, serving successively as bakery sales manager, bakery manager, regional sales manager, and at the time of the foregoing election, as assistant to the president.

Carl A. Person, assistant secretary of the company, resigned effective Jan. 7, 1950, it was announced.

BREAK IN THE STAFF OF LIFE

MARKETINGS GAIN

WINNIPEG—Stocks of Canadian wheat in store or in transit in North America Feb. 23 amounted to 148,818,200 bu., compared with 149,409,800 Feb. 16 and 145,454,600 bu. on the corresponding date last year. Farmers in the prairie provinces marketed 2,172,300 bu. wheat during the week ending Feb. 23, sharply above last year's total of 720,800 bu. This brought cumulative marketings for the crop year to date to 230,529,900 bu. as against 246,307,100 in the like period of the preceding crop year.

BREAK IN THE STAFF OF LIFE

TO VISIT GREAT BRITAIN

TORONTO — Three Toronto boys will be among 50 from all parts of Canada who will visit Great Britain this summer as guests of W. Garfield Weston, well known baker and biscuit manufacturer. The tour is part of a program sponsored by Mr. Weston to cultivate closer relationships between the two countries. It began last year with a trip to Canada for 50 British youths. The Canadian boys will sail from Quebec City July 12 and will spend nearly a month in Britain.

BREAK IN THE STAFF OF LIFE

STORAGE EXPANSION

FARWELL, TEXAS—Grain storage facilities of the Henderson Grain & Seed Co. of Farwell and Lariat are to be increased by 200,000 bu. in the near future, according to C. M. Henderson, owner-manager. An additional 100,000 bu. of storage space will be added at the Farwell plant and an equal amount at the Lariat elevator. When the new storage is completed, the Farwell plant will have a capacity of 600,000 bu. and the Lariat elevator a total of 275,000 bu. Mr. Henderson also is contracting for another elevator "down-state" with a capacity of 200,000 bu.

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Chadron Milling Co. Head Named Nebraska Grain Group President

LINCOLN, NEB. — Paul Babue, manager of the Chadron (Neb.) Milling Co., was elected president of the Nebraska Grain Improvement Assn. at the annual business meeting of the organization which was held at Omaha recently. He succeeds Charles E. Belman, who was head of the grain department of the Maney Milling Co., Omaha, until the time that firm was sold.

Mr. Babue has been an active cooperator in association-sponsored activities in western Nebraska for several years. The distribution of large supplies of certified seed grain by his company has been one of the major grain improvement projects of that area. He served as vice president of the association in 1949.

Other officers named include vice presidents John Rockwell, manager of the Cargill, Inc., branch at Omaha; Earl Gale, Gale Grain & Fuel Co., McCook, and James Hogan, assistant manager of the Interstate Grain Co., Omaha. R. R. Ridge of the Omaha National Bank was renamed treasurer and J. C. Swinbank was reelected field secretary.

H. B. Lilly, Manager of the Gooch Milling & Elevator Co., Lincoln; Charles Deaver, Colton Grain Co., Sidney; Guy Cooper, Jr., Cooper Mills, Humboldt; and John Eidam, Omaha, were named to the executive committee.

In his annual report of progress to the members, J. C. Swinbank, secretary of the association, stated that the association had conducted farmers' grain improvement demonstration plots and field meetings in 13 counties during the past year. Other association projects which received major emphasis in 1949 were those relating to the elimination of rye admixtures in wheat, seed cleaning and treating, seed distribution, and grain storage problems. Activities also have been included to encourage crop improvement practices among 4-H club members and high school vocational agriculture students. Many civic groups, he said, are now cooperating by sponsoring annual crop field days in their respective communities.

"Of basic importance to the entire grain improvement program is the research work of crops and soil scientists at the agricultural experiment stations," Mr. Swinbank stated. "In Nebraska today there is scarcely a farm that is not growing grain crops that originated in the breeding nursery of a state or federal experiment station. Eighty-five percent of the state's wheat acreage is planted to Pawnee, Nebred, and Cheyenne varieties, all of which were first released to farmers by the Nebraska Agricultural Experiment Station. Ninety-five percent of the state's oats and barley also originated from experiment station breeding nurseries. Ninety-six percent of our corn was grown from hybrids—the inbred lines of which were of similar origin."

Other speakers at the annual meeting included E. A. Olson, agricultural extension engineer, who presented slides illustrating demonstrations in forced air grain drying conducted in Nebraska last year. Entomologist E. Hixon told the group that corn borer larvae in stored corn would not live through the summer of 1950; hence, the danger of transmitting the insect through the shipment of "old" corn is negligible.

L. P. Reitz, experiment station agronomist, explained that in plant breeding work it is necessary for the research worker to anticipate by several years the crop production problems of the farmer as well as the needs of the grain trade. "Plans for the grain crops of 1965 must be laid now, so far as the plant breeder is concerned," he said, "because it takes 10 to 12 years to develop and test a new variety sufficiently to decide whether it merits release for commercial production."

The association's annual meeting was held after a joint luncheon meeting with the crop improvement committee of the Omaha Chamber of Commerce. The agricultural division of the chamber was instrumental in organizing the Nebraska Grain Improvement Assn. in 1938.

—BREAD IS THE STAFF OF LIFE—

JOINS BROKERAGE STAFF

PITTSBURGH—John T. Sherry, Pittsburgh flour broker, has announced that W. Coburn Sweet, formerly with Cannon Valley Milling Co., is now associated with his office. Mr. Sweet has purchased a house at Beaver Falls and will make his home there.

—BREAD IS THE STAFF OF LIFE—

AMF STOCK DIVIDEND

NEW YORK—The board of directors of American Machine and Foundry Co. have voted the regular quarterly dividend of 97½¢ a share on the 3.90% cumulative preferred stock, payable April 15 to stockholders of record March 31.

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NEW SPOKANE MILL . . . ONE OF THE WORLD'S MOST MODERN
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A Specialty
Mills in the Heart of the Spring Wheat Section
Capacity, 1,600 Sacks
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Ground Where the Best Wheat Is Grown
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Manufacturers of High-Grade Hard Wheat Flour
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THE NORTHWESTERN MILLER

AOM Meeting at Milling School Resembles National Convention

By PAUL L. DITTEMORE
Technical Editor
The Northwestern Miller

MANHATTAN, KANSAS — The joint meeting of Districts 1 and 2 of the Association of Operative Millers, held at Kansas State College, had the flavor of a national convention of the organization. It was complete with an excellent program, a display of milling machinery and equipment, and record attendance which included the association's president, vice president and secretary.

The millers and allied trades representatives got to take a typical miller's holiday — an inspection trip through the 130-sack mill in the department of milling industry. More than $60,000 worth of new equipment had been installed in the department's mill and everyone was as interested in seeing it in operation as were the members of the staff of the milling school. The staff, with the help of students in the school, have been putting in considerable overtime during the past three months, getting the machinery installed in preparation for the Open House which was one of the features of the meeting.

A luncheon honoring the donors of the equipment was held at the Wareham Hotel March 10. Dr. J. A. Shellenberger, head of the milling school, presided at the luncheon which was attended by more than 60 persons.

John W. Cain, Midland Flour Mills Co., Kansas City, chairman of the milling school's advisory council, in a short talk to the manufacturers' representatives, said that the Open House marked a milestone in the modernization project planned for the college mill.

"We are here to celebrate a starting point, rather than the conclusion of a progressive program," Mr. Cain said. He pointed out that the milling school now is equipped to begin a research program and out of that research, makers of milling machinery should gain as much benefit as the flour milling industry.

Milton S. Eisenhower, president of Kansas State College, was introduced by Mr. Cain and he praised the machinery manufacturers, on behalf of the college, for having made the modernization program possible.

The college president took the opportunity also to discuss the need for "well-rounded citizenship training" by a college graduate. Technical or professional training is not enough for a college graduate in our modern, complex society, he said. He explained the revised college curriculum as an attempt to help the student gain an understanding of those fields which lie out of his sphere of study, and an attempt to aid the students to become effective citizens in a free society.

Elmer W. Reed, executive vice president, Flour Mills of America, Inc., Kansas City, and one of the members of the milling school's advisory council, reminded the operatives that there has been a "revolution" in milling technology during the past quarter century and that milling now must be regarded as a science as well as an art. He said that the up-to-date machinery put in the college mill by the various manufacturers will enable the milling school to give a great amount of assistance to the industry in research on methods to eliminate insect infestation in milling wheat.

The Open House at the mill began at 2 p.m. and the staff and students of the milling school had the mill in operation. One of those "it-always-happens" misfortunes took place to bring about shutting down the mill for a while. A student failed to put the proper amount of oil in a sifter drive reducer housing and the gears gave out. E. P. Farrell, a member of the staff, told the millers he was sorry it happened, but it did provide some research data. "We know now," he said, "that a speed reducer will operate without oil for about three hours."

Rogers C. B. Morton, president, Ballard & Ballard Co., Inc., Louisville, Ky., did an effective job of his address, "Reselling America to the Americans." He was the principal speaker at a dinner held on the college campus the evening of March 10.

Mr. Morton's thesis was that management is not doing all that it could do in selling the idea of private enterprise and democracy to its employees and to the American public. The present situation, he said is not the result of politics, adding that our present political situation instead is the result of conditions that have been allowed to develop.

Dr. A. D. Weber, associate dean of the school of agriculture and associate director of the Kansas Agricultural Experiment Station, preceded Mr. Morton on the dinner program. He discussed the mutual interests of the college and the flour milling industry and complimented the millers for their interest in the welfare of the milling school.

A discussion of the meaning of industrial safety, presented by Prof. G. A. Sellers, head of the department of shop practice, Kansas State College, was the opening item on the program March 11. Mr. Sellers explained how to figure accident frequency and severity rates and gave some comparative figures for other industries.

Dr. H. N. Barham of the department of chemistry, Kansas State College, discussed the dry milling of sorghum grain and showed a flow diagram of a milling process which has been developed by the chemistry department. He said that the dry milling of sorghum grain in the Southwest has the possibility of developing into a profitable field.

The remaining topics on the program, an outline of the Food and Drug Administration's plans for mill infestation research, by J. O. Clarke, and an open forum on mill sanitation, are reported in a news story appearing on page 10 of this issue of The Northwestern Miller.

Farm Storage

(Continued from page 8)

regard to the cost of producing wheat. "Just east of us here in Denver, lie the Great Plains. Farmers there have been growing wheat in recent years for an average cost of less than $1.10 bu. Between the plains and the Corn Belt, the cost edges up to a little over $1.25. In the central Corn Belt it's more than $1.65, and in the eastern Corn Belt area, more than $2.

"Superficially, it might seem that the $2 man ought not to grow any wheat because a man in the plains can grow it 90¢ cheaper. Maybe we should try to drive out of wheat production all those producers who live east of the Missouri River—grow it all in the plains. And, of course, some producers in the plains are presumably less efficient than others in the same area. But where do you draw the line?"

Evidently, Secretary Brannan in approving the CCC policy of cutting off the 7¢ farm storage payment drew the line there.

Farm Objections Seen

Vigorous protests against the new plan are expected from farm groups. The Farmers Union has planned to express objections to the Secretary of Agriculture, and other organizations are expected to do the same.

In effect, the CCC policy decision means USDA is now saying that the parity price support level for wheat, soybeans and flaxseed is too high and that it intends to take away from producers the storage payments at least inferentially guaranteed to producers when in June, 1949, they were urged to take out government loans to build additional farm storage.

It should be emphasized that the PMA grain branch is not in favor of any repudiation of a previous position taken by the government.

For a long time at the grain branch, it has been felt that farmers should show some responsibility for the protection that the loan program gives them. As early as 1941, USDA officials believed that the farm storage payments should be eliminated from the wheat program. Coming now after the government has urged the increase in farm storage, the decision may affirm the distrust that many farmers have for USDA promises. This condition is admitted even within the USDA grain branch.

Trade observers have been trying to assess the market effect of the new policy, but with conflicting conclusions.

How It Will Work

Last year a farmer storing grain on his farm got the price support level, plus 7¢ for holding the grain for the loan period. Under the new policy, the wheat, soybean or flax farmer will no longer get the farm storage payment. And if he sends his commodity to a commercial warehouse, he will be required to pay or have deducted from his loan the cost of storing the commodity.

An appropriate example is a Nebraska wheat producer who in 1949 obtained a 90% of parity loan of $1.93 bu. for his grain stored at the farm. In addition, he received 7¢ bu. for holding the wheat back at his farm. This meant that he obtained $2 bu. for his wheat when he turned it over to the government if he defaulted on his loan.

Now, under the new conditions set up by CCC or at least contemplated at the USDA front office, he will obtain price support at 90% of parity only if he holds his wheat at the farm. No longer will he obtain the 7¢ farm storage payment. And if he stores his grain in a commercial warehouse, he will be compelled to pay the 10¢ bu. storage charges or have these charges deducted from his loan, netting him the loan rate less 10¢ bu. In short, under the proposed plan, unless he holds the commodity at his farm, he stands to lose 17¢ bu. as compared with the 1949 program.

In connection with the whole question, critics point out that the board of directors of the CCC—now the largest financial agent of the government—meets without publishing business discussed or its decisions until they are exposed through newsmen's initiative or press releases. It has been charged that farmers and the public are in the dark while the CCC directors make decisions involving millions of dollars or, as in this instance, take away the farm storage payment which Secretary Brannan had appeared to include in his appeal for farm grain storage expansion.

Such decisions, critics say, result in little wonder that farm leaders raise doubts about the production payment plan of Secretary Brannan since the plan implies that farmers each year would have to go to Congress and the USDA to learn how much they could expect in price support.

DEATHS

William A. Moses, 91, prominent for some years in the grain business in the Southwest, died at his home in Manhattan Beach, Cal., March 8. Details on page 13.

Horatio G. Stinnett, Jr., 62, president of the Harvest Queen Mill & Elevator Co., Plainview, Texas, died March 10 of a heart attack. Details on page 32.

Alfred Fiske Pillsbury, 81, a director of Pillsbury Mills, Inc., and a Minneapolis civic and cultural leader, died March 12. He was a son of John Sargent Pillsbury, co-founder of the milling company. Details on page 11.

Miss Caroline M. Crosby, Minneapolis, daughter of the late John Crosby, pioneer flour miller in Minneapolis, died recently. Miss Crosby, 78, was active in social work for many years. Survivors include a brother, **John Crosby**, director of General Mills, Inc., Minneapolis.

Albert Gochicoa, export manager, Arrow Mills, Inc., Houston, died March 6 after a long illness. Details on page 11.

Carl J. Holmen, 60, Oslo, Norway, died recently. Mr. Holmen was associated with the flour importing firm of Loken & Co. A/S, Oslo, for many years. Knut Upsaker, employed by the firm since 1919 as Mr. Holmen's assistant, has taken over the company's general commercial agency department.

Glenn C. Louie, 62, for 20 years assistant foreman, Kansas Milling Co., Wichita, died March 5, following a long illness. He is survived by his widow, a daughter and a son, all of Wichita.

Edgar L. Berkley, 52, president of the Waxide Paper Co., Kansas City, died of a heart attack in a St. Louis hotel March 13, where he had gone on business early this week. He was a member of the board of directors of Menorah Hospital and of the City National Bank & Trust Co., and a trustee of the University of Kansas City.

J. F. Weinmann, 72, president of the J. F. Weinmann Milling Co., Little Rock, Ark., died March 9 of a heart attack. He was founder and head of the corn milling and formula feed manufacturing business which bears his name.

TONNAGE SALES RECORD SET BY NATIONAL BISCUIT CO.

Net Sales and Income of Company During 1949 Reported Down from Previous Year — Change in Accounting Method Given as Reason

NEW YORK—Although both net sales and income of the National Biscuit Co. declined in 1949, the volume of tonnage sales set a new record.

Net profit slipped to $21,676,903, equal to $3.17 a common share, from $22,713,736, or $3.33 a share, the year before. The report noted that 1948 profits contained an "extraordinary income of $1,400,000" in the form of tax reserves which were returned to income when it was found they were not needed for that purpose.

Net sales for the year declined to $294,420,391 from $296,250,431.

George H. Coppers, president, explained the decline in earnings in this way: "Net profit for 1949 was reduced approximately $2,000,000 because of the accrual of the estimated amount of the 1950 vacations, less the related federal income tax effect."

He referred to a change in providing for vacation payments which reflects in 1949 results the cost of such payments made in 1949 as well as those that have been earned but will not be paid until 1950.

Mr. Coppers pointed out "the decrease in net sales is almost entirely accounted for by the reduced dollar value of foreign sales resulting from the recent devaluation of foreign currencies."

"The outlook for our business for the year 1950 is favorable," he said. "I believe we will have a continuation of volume approximating that enjoyed in 1949."

—BREAD IS THE STAFF OF LIFE—

MICHIGAN, INDIANA AOM GROUPS TO MEET MARCH 18

BATTLE CREEK, MICH.—A full day's program has been arranged for the annual joint meeting of Districts 3 and 6, Association of Operative Millers, to be held at the Post Tavern Hotel March 18. The meeting will begin at 10 a.m. with registration and a tour of the Ralston Purina Co. plant.

A buffet luncheon at the hotel will precede the formal program to be presented during the afternoon. A dinner at 6 p.m. will conclude the day's activities.

Herman Steen, vice president and secretary, Millers National Federation, Chicago, and Donald S. Eber, executive secretary, Association of Operative Millers, Kansas City, are among the speakers scheduled to appear on the program, which is made up largely of technical addresses.

—BREAD IS THE STAFF OF LIFE—

EDWIN C. MUHLY HEADS BALTIMORE BAKERS CLUB

BALTIMORE—Edwin C. Muhly, Muhly's Gem Bakery, was elected president of the Bakers Club of Baltimore in the group's recent annual election of officers. George W. Beck, Beck's Bakery, was elected vice president.

J. E. McGinnis, Standard Brands, Inc., continues as secretary and Anton Hagel, Hagel's Bakery, as treasurer.

Charles Cowan will be chairman of the golf committee for the year, Charles H. Hohman, Wood & Selick, chairman of the sick committee, and Walter F. Kilian, Standard Brands, Inc., chairman of the entertainment committee.

Self-Rising Flour Institute Announces Meeting Program

NASHVILLE—The general program for the 16th annual meeting of the Self-Rising Flour Institute, Inc., has been announced by Allen R. Cornelius, secretary, Nashville. The meeting will be held April 21-22 at the White House, Biloxi, Miss.

The program includes entertainment for ladies, men and children as well as an institute business session and a meeting of the board of directors.

Activities will get under way April 21 with registration and a group luncheon for the entire families. A business session will be held the same afternoon. The program for the business meeting will be announced later.

The board of directors will meet the morning of April 22.

Entertainment will include golf, swimming, fishing, a cocktail party and "seafood jamboree," a boat trip and bridge and canasta for the ladies.

—BREAD IS THE STAFF OF LIFE—

PRODUCTION RATE

On highly mechanized farms (the top-producing half in the U.S.), one worker produces food for 22 persons.

MOSTLY PERSONAL

William E. Doty, bakery service manager for the California Raisin Advisory Board, is on a four-month tour of the country, contacting users of raisins. During this tour Mr. Doty will travel over 10,000 miles and contact some 3,500 bakers from every state in the U.S. He plans to attend 10 conventions of various baking organizations throughout the country. He is on the program agenda as a speaker at five of these conventions. He also will attend and participate in a large number of baking demonstrations.

●

Application has been made with the Kansas City Board of Trade for the transfer of the membership held by **James W. Ringwald,** assistant vice president, Bunge Corp., New York, to **J. V. Fleming,** vice president, Gano Grain Corp., Hutchinson, Kansas.

●

R. B. Caldwell, Tex-O-Kan Flour Mills Co., Kansas City, attended the wheat variety identification school sponsored by the Texas-Oklahoma Wheat Improvement Program in Amarillo March 9-11.

●

Eduardo Escobar, agent for Pillsbury Mills Inc., in Caracas, Venezuela, recently flew to the U.S. on a brief business trip and spent a few days in the New York offices.

●

P. M. Peterson, general manager, durum division, International Milling Co., Minneapolis, recently called on the trade in the Pittsburgh area with **J. Spagnol,** Pittsburgh representative.

●

Harry Bresky—son of **Otto Bresky,** Beaton, president of Iamert-Hincke Milling Co. and Rodney Milling Co., Kansas City, and **Mrs. Bresky**—was recently married at the West View Country Club in Miami Beach to **Helen Sue Arvey,** daughter of Jacob M. Arvey, Chicago, chairman of the Cook County Central Democratic Committee. The young couple will live in Boston after a wedding trip.

●

William J. Ocken has resigned his position with H. Piper Co., Chicago, to become production superintendent for Columbia Baking Co., Miami, Fla. Mr. Ocken, a past president of the American Society of Bakery Engineers, left the recent annual meeting of the ASBE early to fly to Miami to take over his new duties.

●

Philip W. Pillsbury, president, and **B. F. Bowman,** director, new products development, Pillsbury Mills, Inc., Minneapolis, were recent visitors in the New York offices of the company.

●

Ellis D. English, president, Commander-Larabee Milling Co., Minneapolis, visited the offices of the Larabee Flour Mills Co., Kansas City, over the weekend.

●

J. W. Luscombe, president, Southworth Grain Co., Toledo, returned last week from vacation spent in Florida.

●

Ole Olsen of Copenhagen, Denmark, a former member of the staff of the flour importing firm of Brodr. Justesen, Copenhagen, is currently residing in London in order to learn English. Subsequently, Mr. Olsen hopes to obtain an appointment as a student trainee with a British flour milling firm in order to improve his knowledge of the trade. Many well known European flour men obtained their early training in British and American mills, and several Danish students are now employed in Britain.

●

George McIvor and **C. D. Davison,** members of the Canadian Wheat Board, Montreal, visited the floor of the Kansas City Board of Trade March 9.

●

Cliff H. Morris of Cliff H. Morris & Co., New York, is spending some time in San Francisco, getting acquainted with his month-old grandson, whose father, **John Morris,** is associated with St. Regis Paper Co. in that city.

●

Joseph C. Beaven, president, Standard Milling Co., Chicago, became a grandfather Feb. 26 when his daughter, **Mrs. David Spoehr,** Evanston, Ill., gave birth to a baby boy.

●

W. V. Van Scoyk, chief chemist, Valier & Spies Milling Company, St. Louis, has returned from Chicago, where he attended the annual meeting of the American Society of Bakery Engineers.

●

A. V. Imbs, J. F. Imbs Milling Co., St. Louis, has returned from Arizona, where he spent several weeks vacationing.

●

Arthur Beier, Beier's Iowa Bakers, Clinton, Iowa, became a proud grandfather March 9, when a baby boy was born to his daughter, **Mrs. Jean Worthan,** Sterling, Ill.

●

Officers of the King Midas Flour Mills, Minneapolis, are filled with vacation talk. **A. L. Hale,** central states sales manager, is leaving for a three weeks' vacation at Fort Lauderdale, Fla. Just back from a holiday of three weeks in Puerto Rico is **E. J. W. Schellenberger,** traffic manager. **Paul Sather,** western division sales manager, has returned from his vacation at Biloxi, Miss., and the credit manager of the company, **Neil Crouch,** also is back at work after a trip to California. **W. M. Steinke,** vice president, is spending his holiday in Hawaii. Due to leave soon is **W. F. Ewe,** durum division manager. He plans a trip through the South.

●

E. J. Bermel, Pittsburgh district manager of the Eagle Roller Mill Co., New Ulm, Minn., is at the mill on business.

●

George Booth and **E. F. Thompson, Sr.,** partners, Lamson Bros. & Co., Chicago, visited the Kansas City branch of the company March 9-10.

●

Members of the Pittsburgh office of National Biscuit Co. have announced that March is called "Charley Bedsworth Month" in honor of **Charles Bedsworth,** veteran salesman who joined the company in 1903. Mr. Bedsworth will retire June 1, 1950, after 47 years of company service. He has successively been salesman, special salesman, sales manager in charge of country sales and finally in charge of chain store sales.

●

Paul Helms, Sr., Helms Bakeries, Inc., Los Angeles, recently observed the start of his 20th year in the baking business in southern California. Now the employer of 1,492 men and women in two baking plants, Mr. Helms came to California to retire. But in 1930, ground was broken for his first plant and he opened for business

SUMMARY OF FLOUR QUOTATIONS

Week-end flour quotations, in sacks of 100 lb. (Canadian quotations in barrels of 196 lb.) All quotations on basis of carload lots, prompt delivery.

	Chicago	Mpls.	Kans. City	St. Louis	Buffalo
Spring family	$....@7.10	$....@7.15	$....@....	$....@....	$7.80@7.80
Spring top patent	5.60@5.85	@	@	@	@
Spring high gluten	@	5.80@6.00	@	@	6.20@6.25
Spring short	@	5.70@5.90	@	@5.81	@
Spring standard	5.50@5.79	5.50@5.75	@	@5.70	5.65@5.90
Spring first clear	4.80@5.15	5.00@5.85	@	@5.10	5.20@5.20
Hard winter family	@	@	6.20@7.20	@6.90	@
Hard winter short	5.30@5.60	@	5.45@5.85	@5.70	@
Hard winter standard	5.40@5.70	@	5.35@5.45	@5.50	5.80@5.85
Hard winter first clear	@4.50	@	4.19@4.35	@4.75	5.60@5.65
Soft winter family	@	@	@	@8.41	@
Soft winter short patent	6.15@6.85	@	6.80@7.10	@6.35	5.75@6.85
Soft winter standard	5.10@6.00	@	@	@	@
Soft winter straight	@	@	5.60@5.50	@5.35	5.65@5.60
Soft winter first clear	5.40@5.90	@	@	@5.90	4.30@4.35
Rye flour, white	4.25@4.30	3.99@4.20	@	@4.70	4.80@4.95
Rye flour, dark	3.30@3.70	3.00@3.25	@	@3.65	3.80@3.85
Semolina, standard	@6.05	5.85@5.90	@	@6.40	@6.47
Durum, gran., bulk	@5.89	@	@	@	@6.18

	New York	Phila.	Boston	Pittsburgh	Atlanta
Spring family	$....@7.84	$7.35@7.52	$....@....	$7.16@7.85	$....@....
Spring high gluten	6.30@6.41	6.45@6.55	6.27@6.47	6.36@6.55	@
Spring short	@	6.25@6.35	6.12@6.37	6.20@6.42	@
Spring standard	6.04@6.11	6.15@6.25	5.87@6.17	6.00@6.32	@
Spring first clear	5.40@5.60	5.70@5.85	5.37@5.63	5.20@5.65	@
Hard winter short	6.00@6.20	6.00@6.10	6.07@6.27	6.00@6.20	@
Hard winter standard	5.75@6.00	5.90@6.05	5.77@5.92	5.80@5.85	@
Soft winter family	@	@	7.78@7.42	@	@
Soft winter straight	5.15@5.85	@	5.02@5.87	@	@
Soft winter standard	@	5.45@5.65	@	@	@
Rye flour, white	4.80@5.05	4.65@4.75	@	4.80@4.70	@
Rye flour, dark	@	@	@	3.90@4.20	@
Semolina, standard	6.35@6.40	@	@	@6.45	@
Durum, gran., bulk	@	@	@	@6.15	@

	Seattle	Los Angeles
Family patent	$....@7.30	$....@....
Bluestem	@6.17	@
Bakery grades	@6.22	@
Pastry	@5.84	@

	Toronto	*Winnipeg
Spring top patent	$....@11.10	$11.20@11.65
Spring second patent	@10.65	10.70@10.90
Spring first clear	@	@
Spring exports‡	@14.05	@
Ontario soft winters	9.25@ 9.50	@

*In cottons, Fort William basis. ‡280-lb. cottons.

UNITED STATES VISIBLE GRAIN SUPPLY

Visible supply of grain in the U.S. as compiled by the secretary of the Chicago Board of Trade in bushels (000's omitted) on March 5, and corresponding date of a year ago:

	Wheat 1950	Wheat 1949	Corn 1950	Corn 1949	Oats 1950	Oats 1949	Rye 1950	Rye 1949	Barley 1950	Barley 1949
Baltimore	3,695	1,204	3,711	3,646	101	163	72	261	305	254
Boston	1,059	37	...	351						
Buffalo	11,515	1,066	2,682	3,199	1,469	1,232	51	141	2,682	334
Afloat	1,554	...	252	...	460	...	...	...	79	...
Chicago	4,609	1,646	3,684	7,263	769	423	4,455	274	387	451
Afloat	...	...	168	...	...	...	3,158	...	...	...
Duluth	13,844	16,691	3,910	9,190	2,229	530	391	25	6,023	886
Enid	11,695	...	29	...	26	...	...	...	...	...
Ft. Worth	7,414	5,311	219	119	254	156	7	3	17	36
Galveston	3,621	1,422	31	1,397	...	...	...	...	...	...
Hutchinson	13,794	10,298	...	...	...	...	1	22	...	1
Indianapolis	2,952	829	791	1,133	162	192	4	14	...	...
Kansas City	28,482	26,616	4,271	325	52	114	179	200	45	102
Milwaukee	274	81	2,131	314	48	48	...	...	2,227	2,255
Minneapolis	6,187	2,079	4,312	3,261	4,659	457	879	1,057	6,278	6,614
New Orleans	429	286	1,046	1,027	13	8	...	...	...	...
New York	1,373	940	165	418	7	1	...	...	...	...
Afloat	9,078	...	...	...	...	...	...	...	...	...
Omaha	11,146	12,416	7,743	874	87	104	18	25	54	111
Peoria	187	281	282	202	...	...	...	...	...	...
Philadelphia	1,772	1,671	414	712	...	131	31	31	23	181
Sioux City	1,000	1,018	373	231	58	107	1	35	35	71
St. Joseph	3,994	4,343	1,530	708	867	312	...	3	44	12
St. Louis	4,511	2,718	1,280	1,300	239	118	18	10	18	14
Wichita	11,993	6,310	...	...	...	...	...	...	37	...
Totals	147,330	94,479	42,732	36,078	12,280	4,144	7,282	2,337	23,577	9,309

GRAIN FUTURES—CLOSING PRICES

Closing grain futures quotations in leading markets, in cents per bushel:

WHEAT

	Minneapolis Mar	Minneapolis July	Minneapolis Sept	Chicago Mar	Chicago May	Chicago July	Chicago Sept	Kansas City Mar	Kansas City May	Kansas City July	Kansas City Sept
Mar 6	221⅝	211¼	203⅞	224¼	217¼	197⅞	198	222	214	195¼	193⅝
Mar 7	222⅝	211⅝	202⅞	226⅝	218¼	194½	196⅝	223½	214½	195⅝	198
Mar 8	222	211⅞	203⅝	228⅛	216⅝	188⅝	195⅛	223⅝	215⅛	191⅛	195⅛
Mar 9	222⅛	210⅝	202⅝	225⅝	217⅞	198⅝	197⅛	222	214⅞	194⅛	194⅝
Mar 10	223⅝	210⅛	200⅝	226⅝	217⅞	193⅝	195⅞	222	214½	192⅝	192⅞
Mar 11	222⅝	210⅞	201⅛	230⅝	219⅛	190⅝	190⅝	223	215⅛	197⅝	193⅝

	CORN Chicago Mar	CORN Chicago May	RYE Chicago May	RYE Chicago July	RYE Winnipeg May	RYE Winnipeg July	RYE Minneapolis May	RYE Minneapolis July	OATS Chicago Mar	OATS Chicago May	OATS Minneapolis May	OATS Minneapolis July
Mar 6	129⅝	129⅛	131⅝	139⅛	149⅝	145⅞	135⅝	134⅝	74⅝	70⅝	64⅝	58½
Mar 7	130⅛	131	135	137½	148⅝	147⅛	135⅛	135⅛	74⅝	70⅝	64⅝	58⅝
Mar 8	130⅛	130⅝	134⅛	130⅝	148⅝	148	138½	135⅝	74⅝	71⅛	65⅛	58⅝
Mar 9	130⅝	131	132½	134⅝	147	146½	134	133⅛	73⅛	71⅝	65⅛	58⅝
Mar 10	130⅝	130⅝	132⅝	134	146½	146⅝	133⅛	133	73⅝	71⅝	65⅝	59
Mar 11	130⅛	129⅝	132⅝	134⅝	146½	146⅝	134⅛	134	73⅝	71⅝	65⅝	59⅛

SUMMARY OF MILLFEED QUOTATIONS

Week end millfeed quotations, summarized from the market reviews, are based on carload lots, prompt delivery, per ton, packed in 100-lb. sacks, f.o.b. at indicated points:

	Chicago	Minneapolis	Kansas City	St. Louis	Ft. Worth
Spring bran	$44.50@45.25	$....@42.00	$....@....	$....@....	$....@....
Hard winter bran	@	@	39.75@40.25	@	@
Soft winter bran	@	@	@	42.50@44.00	@48.00
Standard midds.*	@45.50	@42.00	@	@	@
Flour midds.†	49.00@51.50	@46.50	44.50@45.00	48.50@49.50	52.00@53.00
Red dog	50.00@52.50	@47.50	@	@	@

	Buffalo	Philadelphia	Boston	Pittsburgh	Atlanta
Spring bran	$51.00@51.50	$....@56.00	$57.00@57.50	$53.50@55.10	$....@....
Standard midds.*	51.00@51.50	@57.00	57.50@58.00	54.50@58.12	@
Flour midds.†	51.50@52.00	@	@	58.00@58.16	@
Red dog	52.00@52.50	@58.00	61.50@61.00	58.00@58.44	@

	Spring bran	Shorts	Middlings
Toronto	$....@57.50	$....@58.00	$....@62.00
‡Winnipeg	$....@51.00	....@54.00	....@....

*Brown shorts. †Gray shorts. ‡Fort William basis.

March 2, 1931. The company was expanded in 1948 with the opening of a second modern baking plant in Montebello.

●

Announcement has been made of the marriage of **Lorentz J. Holgerson**, in charge of country stations for the Sam P. Wallingford Grain Corp., Wichita, to **Alta Louise La Follette** of Wichita.

●

Joe V. Fleming, vice president Garo Grain Corp., Hutchinson, Kansas, and **Mrs. Fleming** returned recently from a three-week vacation tour of Texas and Mexico. They flew from Houston to Mexico City.

●

Lloyd L. Leatherock, manager, special products division, and **John Giertz**, chief chemist, Kansas Milling Co., Wichita, have returned from Chicago, where they attended the convention of the American Society of Bakery Engineers.

●

George Bidwell, president, Bidwell Grain Co., Hutchinson, Kansas, is spending three weeks at a dude ranch near Phoenix, Ariz.

●

Maurice B. Dillon, a supervisor for Spaulding Bakeries, Inc., Scranton, Pa., for the past 17 years has been appointed manager of the company's Scranton plant. He succeeds Joseph B. Whalen, who died in February.

●

Fayne Ritterhouse, son of **Lester A. Ritterhouse**, grain department manager for the Arnold Milling Co., Sterling, Kansas, is a new employee of the B. C. Christopher & Co. office in Hutchinson. He was graduated in January from Kansas State College.

●

James S. Hargett, president of the southwestern division of Cereal Mills, Inc., Oklahoma City, has been named a member on the "mayor's cooperating committee," a group designated to carry on a public relations program to aid the census takers. The committee's slogan is "Count Me In."

●

A. Liebscher, president, H. Dittlinger Roller Mills Co., New Braunfels, Texas, with his wife and daughter, visited for a day in New Orleans last week while en route to Texas from Miami.

●

Harry B. Stoker, Globe Elevator Co., division of F. H. Peavey & Co., Duluth, and **Mrs. Stoker** are vacationing at Rancho de Los Caballeros, near Wickenburg, Ariz. They made a boat trip from New York to San Francisco before going to Arizona.

●

Harry A. Seaver, associate manager of A. Hagaman & Co., Albany, N.Y., for 25 years, has announced his retirement from the baking company. Mr. Seaver joined the company in 1901 as a foreman in the bakeshop. He left the company in 1904 and spent two years in the Philippine Islands where he helped establish and supervise native schools. After he returned to this country he rejoined the baking company and later was named associate manager.

●

R. D. Eddie, president and general manager of the Superior Feed Mills, Oklahoma City, has been reelected member of the board of directors of the Oklahoma City YMCA.

WANT ADS

Advertisements in this department are 10¢ per word; minimum charge, $1. Add 20¢ per insertion for forwarding of replies if keyed to office of publication. (Count six words for signature.) Situation Wanted advertisements will be accepted for 5¢ per word, $1 minimum. Add 20¢ per insertion for keyed replies. Display Want Ads $8 per inch per insertion. All Want Ads cash with order.

HELP WANTED

POSITION AVAILABLE—SECOND MILLER, experienced, 2,000 cwt. hard wheat mill. Union wage. Give experience, age and references. Montana Flour Mills Co., Great Falls, Mont.

WANTED
EXPERIENCED FLOUR BROKER
covering upper New York State, by aggressive, competitive mill; both spring and hard winter wheat flours. Address 606, The Northwestern Miller, 23 Beaver St., New York 4, N. Y.

SITUATIONS WANTED

LADY CHEMIST, 11 YEARS' EXPERIENCE mill laboratories, hard spring and soft wheat flours. Mary Price, 509 Penn St., Coffeyville, Kansas.

POSITION: AT ONCE AS MILLER IN ANY size mill up to 500 bbl. or second in larger. Married, age 36. Over 25 years experience. F. E. Harmon, Bird Island, Minn.

MILL SUPERINTENDENT OR ALLIED trade salesman. Have knowledge and background to be successful. Prefer non-union but not essential. Available immediately. Address 713, The Northwestern Miller, Minneapolis 2, Minn.

MACHINERY FOR SALE

USED GRAIN ELEVATOR MACHINERY
(In Good Condition)
30—20 degree Anti-friction troughing rolls w/supports for 30" belt conveyor.
25—Flat return type rolls for 30" belt conveyor.
700'—30", 5-ply Goodyear rubber covered belting.
400'—30-lb. rail for belt tripper track.
4—11,000-lb. capacity Howe hopper type scales.
Write or call for details
THE CUYAHOGA WRECKING CO.
2219 Front Street, Toledo 5, Ohio
Telephone LEnox 1994

MACHINERY WANTED

WANTED TO BUY — RICHARDSON scales, bag closing machines and other good mill, feed and elevator equipment. J. E. Hagan, 1522 E. High, Jefferson City, Mo.

WANTED
JOBBER FLOUR and FEED SALESMAN

Prefer a man with some acquaintance in the flour and feed trade, in the territory consisting of the southern part of North Carolina, all of South Carolina, and the northeastern part of Georgia.

Must be capable of selling to jobbers and assisting them in developing their trade with the retailers.

Consistent radio advertising has created consumer demands that require representation in this territory. To the man qualified we will pay a guaranteed salary, expenses, plus liberal commission arrangement, and furnish car, if desired.

Write at once, giving details of your age, education, experience, family status, etc. All replies strictly confidential.

P. O. Box 58, Nashville, Tennessee

CCC Bill Returned to Committee

SENATE CONTROVERSY CENTERS ON USE OF COMMISSION FIRMS

Sen. Thye Fails to Oppose Reconsideration of Amendment He Sponsored Requiring Employment of Commission Men in Handling CCC Grain

WASHINGTON—Advocates of the Thye amendment to the Commodity Credit Corp. charter which required the use of terminal commission merchants in the movement of CCC-owned grain were rocked back on their heels this week when the Senate Agriculture Committee in an unusual action recommitted its own bill before it reached the floor of the Senate.

It was learned again through reliable sources on the committee that Sen. Edward Thye (R., Minn.) who had espoused the cause of the terminal commission merchants, failed to object to the return of the bill to the committee.

This same source stated that the committee action indicated that the Thye amendment would either be deleted in its entirety or that the specific language of the amendment regarding terminal commission merchants would be cut out of the amendment.

Removal Favored

Removal of the specific language regarding the commission merchants participation in the movement of CCC-owned grain would be satisfactory to most elements of the grain and milling trades, it has been said. Primarily, the amendment without specific mention of the commission merchants would halt CCC activities in the wheat and flour export business except when the CCC made sales to government agencies. It would mean the return of the private exporting of flour and wheat to Greece and Austria, for example.

The Thye amendment would alter the last paragraph of Sec. 5 in CCC Act (Public Law 806) to read:

"In the corporation's purchasing and selling operations with respect to agricultural commodities (except to sales to other government agencies), and in the acquisition, warehousing, transporting, processing, or handling of agricultural commodities, the corporation shall employ the service of dealers, commission merchants and other usual and customary channels, facilities and arrangements of trade and commerce."

The purpose of the Senate amendment is to increase CCC borrowing power by $2 billion. The House Banking and Currency Committee approved the CCC borrowing authority amendment without the qualifications added by the Senate committee.

Opinions Vary

Milling interests are reported as reflecting contradictory opinions on the matter. Some mills are said to favor the amendment in regard to terminal commission merchants if it means that they will be restored as private trade operators. Others are said to fear that the amendment will mean that all mills will be compelled to buy wheat from CCC through commission men when wheat stocks were completely held by CCC. Some mills object to this condition.

Sen. Thye explained to the Senate this week his reasons for not opposing the return of the controversial CCC charter amendment to the Senate Agriculture Committee. He said that he had been informed that the bill went much further in its coverage than intended. Subsequently the Senate administration leader, Scott Lucas (D., Ill.) said that the USDA had informed him that the proposed amendment would take away from the CCC the authority to own temporary grain storage bins.

Sen. Thye denied that this possibility existed but agreed that the bill should go back to the committee for further consideration. The Minnesota Senator read a series of complaints from country elevator operators representing farmer-owned businesses which alleged they had not received payment from CCC for grain shipped to it by these operators.

Sen. Thye told the Senate he was interested in the small operators. He said, "I am now referring to the man who serves the community, the operator of small farmers' elevators—not the big commission firms which reap a percentage upon the volume of business."

The Thye explanation appears as an about-face on his part since he was author of the amendment to the CCC charter which proposes the mandatory requirement that CCC employ the use of terminal commission merchants in the movement of its own grain.

Overplays hand

CCC, fighting the Thye amendment, appears about to overplay its hand. One Production and Marketing Administration official, Frank Woolley, assitant director in charge of congressional relations, is said to have urged that USDA report to the Senate committee that the Thye amendment would go so far as to drive CCC out of the grain storage business. He is seen to be urging a fright campaign on the Senate. Impartial observers believe that Mr. Woolley may be overplaying his hand in this connection and doubt the accuracy of his opinion on the effect of the Thye amendment in connection with government ownership of grain storage facilities.

The Thye amendment qualifies the general powers of the CCC charter and does not affect the specific powers of the CCC charter which gives the corporation express powers to own and acquire grain storage facilities.

It is believed that if such Senators as Aiken of Vermont and others learned that an attempt was made to deceive them regarding the Thye amendment they might fight to that it was retained in the CCC charter.

Would Cause Revolt

The attitude of the Senate Agriculture Committee is that CCC is growing to be an immanagerable giant, and any hint that its directors are trying to conceal their ultimate purposes would provoke a revolt even among the administration supporters.

One senator said he believed that the Senate committee would either eliminate the language of the Thye amendment regarding the inclusion of terminal commission merchants in the CCC charter amendment or kill the amendment completely.

On the basis of information received concerning the Woolley activities in regard to the CCC approach to the situation it appears that the CCC may still lose its fight to keep the terminal commission merchants out of the movement of their grain. Sen. Thye's position in connection with his own amendment is equivocal and leads one to the conclusion that he is not heartily supporting the interests of the terminal commission merchants whose cause he adopted when he offered the amendment originally. It is significant that Sen. Thye interested himself in the terminal commission merchants' behalf after Sen. Hubert Humphrey (D., Minn.) had introduced the terminal commission merchants' representatives to the Senate Agriculture Committee when they first appeared here at the committee hearings on the CCC charter amendment.

Samuel C. Gale Heads Advertising Council

Mr. Gale Studies Examples of GMI's Service-Type Advertising

NEW YORK—Samuel C. Gale, vice president and director of advertising, General Mills, Inc., Minneapolis, was elected chairman of the Advertising Council, Inc., at the annual meeting of the board of directors here March 9.

Mr. Gale, who has been a council director since 1948, is the first Midwest business leader ever to be chosen for this position. He succeeds Charles G. Mortimer, Jr., vice president in charge of marketing, General Foods Corp., who has served as chairman of the council's board of directors for the past three years. Mr. Mortimer has been appointed chairman of the council's policy planning committee.

Mr. Gale, born in Minneapolis July 20, 1895, joined the advertising department of Brown, Blodgett & Sperry, a printing firm in St. Paul, following service in World War I. A year later, he joined the staff of the Washburn Crosby Co., which was pioneering in service-type advertising and has instituted the Betty Crocker kitchens.

When General Mills was formed in 1928, Mr. Gale was given increased responsibilities for the company's advertising program, and in 1943 he was appointed vice president. He has gradually assumed responsibility for the Betty Crocker Home Service kitchens, all company advertising, the market analysis operation and the relatively new field of public service.

Throughout his long advertising career, Mr. Gale has carried on a spirited campaign for educational, constructive advertising, founded on truth. He has laid down these principles as a basic code for his company's advertising:

"Our advertising shall be truthful, informative and educational.

"Our advertising shall render the maximum of helpful service.

"Our advertising shall, insofar as possible, seek to expand markets rather than merely take business from competitors."

Mr. Gale has a deep conviction that institutional advertising can be a powerful force to inform and educate the public on the economic facts of life in America. He believes that business must move forward generally on the front of corporate good citizenship and interest itself in the problems of education and international understanding.

Despite his pressing business obligations, Mr. Gale has many outside interests and affiliations. He is a member of the Minneapolis Club, the National Citizens Commission for the Public Schools, the Skylight Club and the5.55 Club, and is a director of the Foreign Policy Assn. and the Minnesota United Nations Committee.

Flour Sales Summaries from Leading Markets

Prices reported in The Northwestern Miller's market reviews are for flour packed in 100-lb. cotton sacks unless otherwise specified. Mill list prices are quoted in the principal manufacturing centers and sales prices in the larger distributing centers. They represent average wholesale levels and do not take into account high or low extremes at which occasional individual sales may have been made. Except as noted, the price situation reported in these columns is that of the day preceding publication.

Southwest

Kansas City: Flour sales in the Southwest last week slipped considerably due to the lack of buying interest on the part of domestic bakers. Export and government sales which made up about 30% of the week's dealings helped to keep business from taking a sharper nosedive. Sales averaged 36% of a six-day week capacity, compared with 47% the preceding week and 19% a year ago.

Business with the bakery trade last week was largely on an immediate shipment basis. Conditions, which are different this year from preceding years, do not permit discounts on deferred shipments of flour and offer no incentive to buyers to purchase ahead of the immediate period. On several days last week fully 80% of the business was for shipment within a week. These sales were either straight immediate shipment bookings or price-date-of-shipment.

Round lot sales to bakers were totally lacking. Scarcely any sales larger than 3,000 sacks were reported. Most orders were single or double cars. This type of activity was quite prevalent in the early part of the week, but died out by the weekend. An eastern chain baker purchased a few small lots and other chains proceeded on p.d.s. schedules which were set up in recent weeks.

Family flour business was slow and inconsequential. Shipments moved along in good volume, but new bookings were limited. Prices were unchanged compared with a week ago.

Flour shipments by now are greatly surpassing bookings, and mills saw further shrinkage of unfilled order balances. Most mills are in a position to run between 18 and 28 days at the present time. They indicate practically all bakery accounts need to buy flour, but if they are buying it is either for immediate shipment or p.d.s.

Export flour business was rather slow last week. Great Britain was the principal buyer, taking .46% ash, 10.75% protein straights on the basis of $4.18 f.a.s. Baltimore, net to the mill. Netherlands East Indies purchased about 100,000 sacks of hard and soft wheat flours and Norway bought some small lots for Gulf clearance. PMA was expected in the market momentarily to procure around 250,000 sacks of flour for shipment to Greece, as authorized by a recent ECA grant.

Production was sharply lower at Kansas City. Output declined to 70% of capacity last week, compared with 80% the preceding week and 76% a year ago.

Quotations, carlots, Kansas City, March 11, cottons: hard winter bakery short patent $5.45@5.65, standard 95% patent $5.35@5.45, straight $5.25@5.35; established brands of family flour $6.20@7.10, first clears $4.10@4.25, second clears $3.60@3.75, 1% ash clears or higher $3.10@3.25; soft wheat short patent $6.80@7.10, straight $5.40@5.50, cake flour $6.10@6.85.

One mill reports domestic business active, 3 fair, 9 quiet, 7 slow, 6 dull.

Texas: Demand last week continued at the same low level as in several previous weeks. Sales amounted to 30 to 35% of capacity, mainly family flour, with the usual few scattering cars for export to the West Indies. Operations were unchanged, averaging about four days' running time. Prices were unchanged to 10¢ sack higher on family and bakers flour, unchanged on clears. Quotations March 11: family extra high patent $6.30@6.75, high patent $6@6.45; standard bakers, unenriched $5.60@5.80; first clears, unenriched $4.50@4.60, delivered TCP.

Oklahoma City: Sales declined last week and averaged 38% compared with 65% the previous week and 20% a year ago. All sales were in the domestic class and were divided 60% to family buyers and 40% to bakers. Operations averaged 75%, compared with 73% the previous week and 65% a year ago. Prices closed unchanged on family flour and unchanged to 15¢ higher on bakery flour.

Quotations, delivered Oklahoma points, March 11: carlots, family short patent $6.10@7.05, standard patent $5.85@6.70; bakery unenriched short patent $5.55@6, standard patent $5.30@5.75, straight grade $5.20@5.65; truck lots 35¢ higher on all grades.

Hutchinson: Flour buying was on a somewhat enlarged scale last week for mills of this region, but no volume contracts were closed. It was more a matter of a greater number of small fill-in bookings. The family trade bought a little more freely than in recent weeks. Shipping directions were satisfactory, and operations ranged from 50% up. Quotations, up 10¢ sack from the preceding week: family patent $6@6.10, bakers patent $5.30@5.40, standard $5.15@5.25.

Salina: Demand for flour last week was very slow. Prices were about 10¢ sack higher. Shipping directions are satisfactory.

Denver: The flour market held steady last week. Supplies were sufficient to meet demand.

Wichita: Mills operated at 88% of capacity last week, compared with 82% the preceding week and 85% a year ago. Domestic sales, divided about evenly between bakers and family trade, averaged 39%, compared with 43% the previous week and 45% a year ago. One mill reported export sales at 50% of capacity. In others they were negligible. Shipping directions were good. Prices advanced 10¢ sack.

The Stock Market Picture

Quotations on baking, milling and allied stocks listed on the New York Stock Exchange and the New York Curb Market:

	High (1949-50)	Low (1949-50)	Close Mar. 4, 1950	Close Mar. 10, 1950
Allied Mills, Inc.	39¾	24⅞	38⅝	38½
Allis-Chalmers	34⅝	23⅛	34	33⅝
American Cyanamid	57⅞	35¼	56⅞	55
American Cyanamid, Pfd.	133⅝	99	133	130½
Archer-Daniels-Midland Co.	47½	30⅝	46⅝	46½
Borden	51¼	38⅝	51¼	50⅝
Burry Biscuit Corp.	4⅝	1½	4⅝	4⅞
Continental Baking Co.	16⅝	11⅞	15¼	14½
Continental Baking Co., $5.50 Pfd.	100	85	98	98
Corn Products Refining Co.	73⅛	60	69½	69
Cream of Wheat	30¼	23	30½	30⅝
Dow Chemical	61¼	43	60⅝	60⅝
Dow Chemical, $4 A Pfd.	110	103⅞	109	109
Dow Chemical, $3.25 2nd Pfd.	120⅝	101	119⅝	119½
General Baking Co.	11	8⅝	11⅝	11½
General Foods Corp.	50⅝	39½	49⅝	49⅝
General Foods Corp., $3.50 Pfd.	103	93⅞	100½	101½
General Mills, Inc.	58⅝	44⅝	56⅝	56⅝
General Mills, Inc., 5% Pfd.	129	113⅝	128	127
Hathaway Bakeries, Inc., "A"	11⅝	8½	10⅝	11
Horn & Hardart Corp. of New York	33	30⅝	30⅝	30½
Merck & Co.	62⅞	37	61½	61⅝
Merck & Co., $4 Pfd.	130½	103½	127	127½
National Biscuit Co.	40⅝	30⅜	39⅝	39
National Biscuit Co., $7 Pfd.	186	170¼	183⅞	184⅞
Pillsbury Mills, Inc.	34¼	30	34¼	34
Procter & Gamble	69¼	37½	69	69⅝
Purity Bakeries Corp.	34⅞	24¼	33	37
Quaker Oats Co.	117	85¼	107	105½
Quaker Oats, $6 Pfd.	150	142⅞	150	137
St. Regis Paper Co.	9⅛	4⅝	7⅞	7⅞
St. Regis Paper Co., $4.40 Pfd.	90	77	87	86½
Standard Brands, Inc.	23⅝	17¼	23	22⅞
Standard Brands, Inc., $4.50 Pfd.	95½	82	95	95½
§Sterling Drug	41⅜	30	39⅝	37⅝
Sunshine Biscuits, Inc.	69⅝	50½	59½	50½
United Biscuit of America	33⅞	30⅝	31¼	30⅞
Ward Baking Co., Warrants	4⅝	2⅝	4⅛	3⅛
Ward Baking Co.	19⅝	10	18⅝	18½
Ward Baking Co., $5.50 Pfd.	100	87½	100	100½

	Bid	Asked
*Colorado Milling & Elevator Co.	13½	15
*Safety Car Heating & Lighting Co., Inc.	16	17½
*Standard Milling Co.	7⅞	9⅞

Closing bid and asked prices on stocks not traded March 10:

	Bid	Asked
Allis-Chalmers, $3.25 Pfd.	87½	87½
Corn Prod. Refining Co., $7 Pfd.	184½	185⅝
**Flour Mills of America, Inc.	10½	11
General Baking Co., $8 Pfd.	162½	165
General Mills, Inc., 3⅝% Pfd.	112½	113½
Great A. & P. Tea Co.	143	144
Great A. & P. Tea Co., $5 Pfd.	134	135⅝
Horn & Hardart Corp. of New York, $5 Pfd.	111½	113
Merck & Co., $3.50 Pfd.	95	97
Novadel-Agene	16½	17¼
Omar, Inc.	17⅝	18
Pillsbury Mills, Inc., $4 Pfd.	103	103½
Ralston Purina Co., $3.75 Pfd.	101½	103⅝
§Sterling Drug, $3.50 Pfd.	99½	100
Un. Biscuit of Am., $4.50 Pfd.	107½	110
Victor Chemical Works	44½	45½
Victor Chem. Works, $3.50 Pfd.	97½	99½
Wagner Baking Co.	6⅞	6½
Wagner Baking Co., Pfd.	109	112

**Midwest stock market. *Over counter. §Subsidiary Sterwin Chemicals, Inc.

Northwest

Minneapolis: Flour sales last week were only about one fifth the quantity booked the previous week as buyers once again reverted to waiting out the market. Somewhat stronger prices were quoted in line with advancing wheat costs and an easier millfeed market, which only appeared to increase the resistance of buyers. Those who booked supplies were interested only in what they needed for nearby positions. There was no interest in round lot purchases.

Directions were considered about average, with mills running five days for most concerns. The backlog of unfilled contracts is estimated at about 30 days as sales are just about keeping up with shipments. This situation has continued now with slight variations for almost six months.

Family flour sales were small, although directions improved. With prices unchanged, buyers merely ordered supplies from previous contracts. Consumer buying is reported to have picked up somewhat.

Sales by spring wheat mills averaged 31% of capacity, compared with 158% the previous week and 120% in the corresponding week last year. Shipments from mills averaged 76% of capacity, compared with 79% the preceding week. (Percentage figures for this year are based on a five-day week; for last year on a six-day week.)

Production at Minneapolis mills averaged 63% of capacity, compared with 68% the previous week and 58% a year ago. For the entire Northwest operations averaged 67% of capacity, compared with 69% the preceding week and 65% a year ago.

Quotations March 13: standard patent $5.50@5.70, short patent $5.70@5.90, high gluten $5.80@6, established brands of family flour, enriched $7.15, first clear $5.05@5.65, whole wheat $5.35@5.55.

Interior Northwest Mills: Flour business was reported very slow by most interior mills. Buyers continued to watch for lower prices. Shipping directions, meanwhile, were fair to good. Production at interior mills averaged 69% of capacity, compared with 70% the previous week and 68% a year ago.

Central West

Chicago: The four-day bakery engineers' convention here last week played an important role in the lack of business shown during the week. The flour market was extremely quiet, and sales were at a minimum. Bakers' resistance to prices continued and only the usual amount of small, fill-in orders was placed. Mill representatives believe there will not be much improvement in buying or interest until the new crop year begins. Shipping directions were fair to good.

Family flour sales also declined and

Frederick E. Gross

TAKES CHASE POST—From the Chase Bag Co.'s executive office in New York, F. H. Ludington, president, has announced the appointment of Frederick E. Gross as manager of Chase's paper and paper bag division. Mr. Gross, formerly of New Orleans, will make his headquarters in the company's general sales office in Chicago. He has wide experience in paper and paper bag manufacturing and in allied industries. Since entering the bag industry eight years ago, he has organized mills and assisted in the design of plants for manufacture of paper bags.

very little booking was done last week. Most sales were confined to small lots. Deliveries slowed up and were only fair.

Quotations March 11: spring top patent $5.60@5.69, standard patent $5.50@5.79, first clear $4.60@5.34; family flour $7.50; hard winter short patent $5.50@5.80, 95% patent $5.40@5.70, first clear $4.50; soft winter short patent $6.15@6.85, standard patent $5.10@6.30, first clear $5.60@5.90.

St. Louis: Local mills report that new sales last week were generally good and that shipping directions on soft wheat flour were very good. Hard wheat flour shipping instructions have improved since the end of the coal strike. Prices on clears have improved, due largely to good demand.

Despite slowly dwindling unfilled contracts central states mills are finding it difficult to originate new business, and the aggregate bookings last week were disappointing. Buyers resisted even the slight price advances, maintaining the position that they will secure supplies on a better basis. Clears have been in somewhat better demand due, principally, to recent export business and anticipated army purchases. Prices of the better and lower grades were about 5¢ over the previous week.

Quotations St. Louis, March 11: family top soft patent $6.45, ordinary $5.35, top hard $6.80, ordinary $5.60; bakers soft winter short patent $6.35, cake $6.35, pastry $5.10, soft straights $5.25, clears $3.90; hard winter short patent $5.70, standard patent $5.50, clears $4.75; spring short patent $5.85, standard $5.70, clear $5.10, low protein clears $4.45.

Toledo: Little change was noted in the milling or sale of flour last week. Demand was light, and some claimed the situation even worse than it was the previous week. Most buyers avoided commitments beyond 30 days.

East

Buffalo: Flour prices stayed within a narrow range at Buffalo. The local trade has been exercising extreme caution in booking ahead on bakery flour. The wholesale houses and bakeries are still limiting their inventories to nearby needs only, with little confidence in the general business conditions and with the hope of price reductions. From all indications, however, there appears to be no reason to expect any price declines because of the present strength in wheat futures.

Shipping directions for the local mills have vastly improved, and contracts are now being liquidated. Production continues to be at the same high level.

Quotations March 11: spring family $7.80@7.90, high gluten $6.20@6.25, standard $5.85@5.90, first clear $5.20@5.30; hard winter standard $5.90@5.95, first clear $5.60@5.65; soft winter short patent $5.75@5.80, straight $5.55@5.60, first clear $4.30@4.35.

Boston: Flour quotations in the Boston market were practically unchanged last week. The only change in springs occurred in patents, which showed a slight broadening of the price range on the low side. Hard winters are 5¢ lower, while soft wheat flours were all unchanged.

Business continued extremely dull, with practically all buyers bearish and only contracting for supplies sufficient to maintain a workable inventory. A wide circulation of bullish news from trade services failed to impress most operators. However, there was considerable discussion relative to market trends in relation to the effects of the green bugs and drouth in the producing areas.

Quotations March 11: spring short patents $6.12@6.37, standards $5.97@6.17, high gluten $6.27@6.47, first clears $5.37@5.62; hard winter short patents $6.07@6.27, standards $5.77@5.92; Pacific soft wheat flour $6.27@6.52, eastern soft winter straights $5.02@5.97, high ratio $6.27@7.27, family $7.79@7.82.

COURTESY CLUB MEMBERS SERVE AT MEETING

★

CHICAGO—Members of the Bakers Courtesy Club of Chicago again were on the job early and late during the annual meeting of the American Society of Bakery Engineers. Starting early Sunday morning, they manned the information desk daily, and from 10 to 12 members served as ushers at each convention session, the baked foods exhibit and at the "bull session." This well-known Chicago allied organization has for many years provided this service at the engineers' convention and acknowledgment by the society was again given to the "Ask Me" men by devoting a full page in the convention program to the organization. One paragraph states: "The services of the men of the Bakers Courtesy Club are entirely voluntary. The club consists of Chicago allied men and has performed these essential services for our society for many years thereby adding greatly to the success of our meetings. This outstanding organization has long been of real service to us and to the industry of which we are all a part. May they continue to grow and prosper."

Subsidy Rates Under Wheat Agreement

(In cents per bushel)

	March 7			March 8			March 9			March 10			March 11		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
East Coast Ports—															
To all destinations	47	48	29	47	48	29	47	48	29	47	48	27	47	48	27
West Coast Ports—															
To all destinations	33	40	27	33	33	27	33	33	26	33	33	26	33	33	27
Gulf Coast Ports—															
To all of Europe, Mediterranean, Middle East, all of Africa and adjacent islands	49	51	32	49	51	32	50	50	30	50	50	28	49	51	30
Far East and adjacent areas	48	48	26	48	48	30	47	48	28	47	48	27	48	48	28
Latin America, West Indies and Mexico	46	47	28	46	47	28	46	46	26	46	46	26	46	47	26

(1) February-April. (2) May 1-June 10. (3) June 11-July 31.

New York: Buyers were indifferent to new flour contracts, and business was in extremely small volume. The active buying of the previous week filled their current needs and they showed no intention of purchasing further unless another drop in prices occurs. Sales were limited to small lots for prompt shipment and were divided among flours of the various types. Cake grades commanded their share, with sweet goods sales reported at normal figures.

Only small routine buying was reported by chain bakers. Some are covered through April, and in other instances, purchasing was on price-date-of-shipment basis.

Shipping directions were slower as conclusion of the coal strike removed fear of a rail tie-up. In general, in spite of seasonally colder weather, interest was slack. Jobbers continued to complain about mills which sell directly to small bakers.

Prices were practically unchanged. Quotations March 11: spring family flour $7.80, high glutens $6.30@6.45, standard patents $6@6.15, clears $5.40@5.60; southwestern short patents $6.05@6.20, standard patents $5.75@6; high ratio soft winters $6.25@7.25, straights $5.15@5.95.

Pittsburgh: Demand for flour increased the past week but not to the extent anticipated with the reopening of mines and mills in the area. Wholesale and retail bakers continued to buy cautiously. Most commitments were for 30 days, with 60 days the limit. Directions were brisk.

Wholesale and retail bakers were not spurred to buying when flour prices advanced 5@15¢ sack. Bakers express their price ideas by placing offers at 15@25¢ under current postings. These were promptly turned down by the mills. Mill representatives believe that hand-to-mouth flour buying is likely to be continued for some time. Family flour sales were satisfactory and directions good. Hard Kansas spring and soft winter wheat flour sales were moderate, but showed an increase over the previous week.

Quotations, f.o.b. Pittsburgh points, March 11: hard Kansas bakers standard patent $5.80@5.95, medium patent $5.90@6.05, short patent $6@6.20; spring wheat standard patent $6@6.35, medium patent $6.10@6.40, short patent $6.20@6.45; clears $5.30@5.65; high gluten $6.30@6.55; family flour, advertised brands $7.16@7.85, other brands $6@7.10; pastry and cake flours $5.30@7; Pacific Coast pastry flour $6.23.

Philadelphia: Trading has settled down to a slow pace, which many think will continue for some time unless a new development dictates purchasing in volume. Back of such thinking is the knowledge that a number of bakers took advantage of recent price concessions and are fairly well supplied for nearby needs.

Prices last week failed to move in either direction, and quotations are unchanged.

Larger bakers are reported remaining on the sidelines while they make further tests of market strength. Except for those who acquired flour under lower postings by mills seeking running time, smaller bakers are inclined to follow leadership of the chains. The group which passed up the lower rates is saving the market from grinding to a complete standstill by their hand-to-mouth buying.

The lag in retail sales continues an important factor in light purchasing by bakers. But bakers hope the restored purchasing power afforded by settlement of coal strike will bring some relief.

The pickup in export demand at some centers has not been reflected here, but the trade is hopeful of sharing such activity before foreign quotas are filled. The only shipment from here last week was a modest 500 sacks for Havana.

Quotations March 11: spring family $7.25@7.55, high gluten $6.45@6.55, short patent $6.25@6.35, standard patent $6.15@6.25, first clear $5.70@5.85; hard winter short patent $6@6.10, standard patent $5.90@6.05; soft winter standard $4.85@5.05.

South

New Orleans: The strength in wheat gave flour buyers little incentive. On the contrary, they resisted the price advances, with a resultant small volume of flour sales. Immediate and prompt shipment business was most common.

Hard winters enjoyed the bulk of the business with spring wheats participating in a lesser degree. In recent weeks northern springs have been in slightly better demand, especially with the baking and jobbing trade.

Sales of cracker and cookie flours have been holding up well, particularly on the central states type of soft winters. Cake and pastry bakers are purchasing flour very sparingly.

Shipping directions are normal for this season, with stocks on hand showing a slight increase. Export sales of flour showed some improvement, particularly to European countries. The U.K. bought substantial quantities, and small amounts went to Norway. Sales to the Latin American countries are limited.

Quotations March 11, carlots, delivered, packed in 100-lb multiwall paper bags: hard winter bakery short patent $5.60@5.75, standard $5.40@5.55, first clear $4.25@4.55; spring wheat bakery short patent $6.05@6.25, standard $5.85@6, first clear $5.30@5.60, high gluten $6.15@6.30; soft wheat short patent $5.75@6.05, straight $5.25@5.50, first clear $4.40@4.70, high ratio cake $6.05@6.40; Pacific Coast cake $6.75@6.90, pastry $6.10@6.25; basis all rail.

Pacific Coast

Seattle: The market was quiet with little change in prices. The situation reflected a narrow demand and a cautious attitude on the part of buy-

ers. The opinion in the trade is that one of these days grain markets will slump heavily, and no one wants to be caught with any inventory when a shift in government buying policy, such as withdrawal of CCC from Pacific Northwest markets or restricted purchasing, makes a decline in wheat prices inevitable. Quotations March 11: family patent $7, bluestem $6.17, bakery $6.22, pastry $5.96.

Toronto-Montreal: The U.K. continues to take bulk of Canadian flour exported. Shipments to other sources are small. Amounts going to domestic outlets are larger than usual, but competitive conditions make it difficult to do business.

Quotations March 11: top patent springs for use in Canada $11.10 bbl., seconds $10.60, bakers $10.50, all less cash discounts, in 98's cotton, mixed cars with 10¢ added for cartage where used; for export to U.K., government regulation flour $14.05 per 280-lb. to end of April, winter ports.

There is little movement of winter wheat flour in domestic market, but there are some export inquiries. Quotations March 11: $9.25@9.90 bbl., f.o.b. Montreal; export $4.80 sack, export cottons, f.a.s. Halifax.

Deliveries of winter wheat are poor. Demand has increased, which has resulted in higher prices. Quotations March 11: $1.90@1.97 bu., f.o.b. shipping point.

Portland: An improved flour demand from most classes of buyers was in evidence in the Pacific Northwest last week. Wheat prices were moving up and with flour prices doing the same, buyers were in the market for sizable quantities of flour. Inventories had been permitted to run down, and apparently bakers and wholesalers were afraid of markets getting away from them.

Export business is not showing any life. Dutch East Indies business is hard to work and prices are low.

Quotations March 11: high gluten $6.26, all Montana $6.20, fancy hard wheat clears $6.10, bluestem bakers $6.11, cake $6.86, pastry $6.05, whole wheat 100% $5.70, graham $5.60, cracked wheat $5.60.

Canada

Winnipeg: Of the 89,000 bbl. Canadian flour worked for export last week, 79,000 bbl. were shipped to IWA countries, including the Philippines, Cuba, Trinidad, Bahamas, Belgian Congo, Haiti, Ecuador and the Dominican Republic. The remainder was destined for the following Class 2 countries: Formosa, Ceylon, Costa Rica and El Salvador. Domestic trade was moderate, with mills running approximately 70% of capacity. Supplies were light and prices were unchanged.

Quotations March 11: top patent springs for delivery between Fort William and the British Columbia boundary $11.20@11.40, cottons; second patents $10.70@10.90; second patents to bakers $10.20@10.40.

Vancouver: The continued unsettled state of affairs in the Orient was reflected in the poor flour business available to Canadian mills last week. Shippers have been very disappointed in Manila inquiries following the ratification of the International Wheat Agreement by the Philippines. Only very small lots have been worked to Manila. And cables indicate that, while demand continues, imports will be strictly regulated by the availability of exchange credits. Under the new set-up in the Philippines, few Canadian exporters are sending out flour on a consignment basis.

There were numerous reports regarding additional flour purchases in Canada for Colombo, Ceylon, a fourth and possibly a fifth full cargo were reported being worked. Three such cargoes have already been shipped from here, but it was believed that not many Canadian mills would be interested in further business due to the scarcity of No. 3 wheat, called for in the Ceylon order. Some of this wheat is reported in store at the head of the lakes, and it might be used by larger mills in the East. There were also reports that the business might move through Halifax, but this was not confirmed.

Continued shortage of dollar credits limits the sale of Canadian flour to other points around the Pacific.

Domestic flour sales are still only average. There have been some reports of higher prices by some of the mills, but most are holding to list. Ample supplies are on hand for current needs.

Quotations: hard wheat grinds, first patents $11.10 in 98's cottons, bakers patents $9.85 in paper bags and $10.25 in cotton bags; western cake and pastry to the trade $11.20@11.65.

Millfeed

Minneapolis: Millfeed prices are lower than they were a week ago, with bran showing a decline of $2.50 ton and other types down $1. The reductions occurred late last week following a sustained climb and are regarded as a normal reaction to the stronger price action rather than an indication of a new downward trend. Demand is good and supplies are not excessive. Quotations March 13: bran $42, standard midds. $45, flour midds. $46.50, red dog $47.50.

Kansas City: Slack production by flour mills caused millfeed to be in scarce supply, and the market picked up strength this week. By March 13 bran had advanced to $39.75@40.25 sacked, Kansas City, and shorts $44.50@45 sacked, Kansas City. Demand was somewhat improved, but lack of offerings was the main reason for price strength.

Chicago: Demand is light, supplies are ample. Quotations: Bran $44.50@45.50, standard midds. $48.50, flour midds. $49@51.50, red dog $50@52.50.

Portland: Mill run $46.50, middlings $52 ton.

Wichita: Millfeed demand was fair last week. Offerings about offset the demand. Quotations, basis Kansas City, March 11: bran $39.50, shorts $44.50; both bran and shorts advanced $1.50 and $1.75 ton, compared with the preceding week.

Boston: Trading was dull last week. Only sales reported were small job-lots for immediate delivery. Asking prices were quite firm despite the low buying interest. Spring bran and middlings were unchanged. Red dog eased 50¢, while mixed feeds were $1 higher. Quotations March 11: spring bran $57@57.50, middlings $57.50@58, mixed feeds $57@58, red dog $62.50@63.

Ogden: Millfeed prices remained unchanged last week, with supply and demand about equal. Plants are working to capacity, five days a week and are booked into April. Quotations: red bran and mill run $47, middlings $50; to Denver: red bran and mill run $54, middlings $57; to California: red bran and mill run $54.50, middlings $57.50, f.o.b. San Francisco and Los Angeles.

Denver: The millfeed market is currently showing considerable strength. Prices are up somewhat and supplies are sufficient for needs. Quotations: shorts $46.50, bran $41.50.

Duluth: Demand is slow; the trend is lower and supplies are adequate; quotations: pure bran $43.50, standard bran $42.50, standard midds. $45.50, flour midds. $47.50, mixed feeds $45.50, red dog $48.50.

New Orleans: Millfeed sales experienced a week of almost steady declines last week. Demand was at a low volume. Offerings were freer toward the weekend, with the demand for bran exceeding that for shorts. Quotations: bran $49@49.50, shorts $54@54.50.

Vancouver: List prices here were advanced $2 ton last week, presumably due to strength in eastern demand, but local sales held at a very low level. One dealer said sales were the poorest in 11 years. Prospects for improvement are not good because the poultry population continues to show a decline. Cash car quotations: bran $50, shorts $51, middlings $53.

Hutchinson: Millfeed demand declined last week and prices reacted as much as $2.75 ton from the peak reached in the forepart of the week. Demand for bran held up better than for shorts. Quotations, Kansas City basis: bran $39@39.50, gray shorts $44@44.50.

Salina: Demand last week was fair. Bran was 50¢ ton lower and shorts were unchanged. Supplies are about in line with trade requirements. Quotations, basis Kansas City: bran $39.50@40, gray shorts $45@45.50.

Buffalo: Strength in millfeed continued last week. Bran was at a premium over the West, while standard midds. improved to the western basis. Demand continued to be good and the local supplies were fairly heavy. Red dog showed strength after a long period of backwardness. Quotations March 11, f.o.b. Buffalo: bran $51@51.50, standard midds. $51@51.50, flour midds. $51.50@52, red dog $52@52.50.

Pittsburgh: Millfeed demand was good last week. Prices held firm, at around the same level as the previous week. Cold weather and the back-to-work movement following the coal strike spurred sales. Quotations, f.o.b. Pittsburgh points: bran $53.50@55.10, standard midds. $54.50@56.10, flour midds. $58@58.10, red dog $59@59.60.

Ft. Worth: Quotations March 11: bran $46, gray shorts $52@53, delivered Texas common points—$2@3 lower on bran and $1.50 down on shorts compared with the previous week. Demand was somewhat less active while offerings were slightly more plentiful.

Oklahoma City: Millfeed closed $1.70 higher on all classes, compared with the previous week. Quotations, straight cars: bran $41.50@42.50, mill run $44@45, shorts $46.50@47.50; mixed or post cars $1 higher on all classes.

Seattle: The market last week was quiet, with buyers well supplied and inclined to await developments. Sellers were in no mood to press sales, due to lack of supplies. Montana productions were quoted at the same level as local brands, $46.50@47, delivered common transit points.

Toronto-Montreal: Increased demand has resulted in shortages in some districts. Bran especially is in

Don F. Cupell

Earl B. Cox

NEW ASBE OFFICERS—Don F. Cupell, Wagner Baking Corp., Newark, N.J., was elected president of the American Society of Bakery Engineers at that group's recent annual meeting in Chicago. Named first vice president was Earl B. Cox, Helms Bakeries, Inc., Los Angeles. Charles E. Riley, Brulite Co., Chicago, was elected second vice president, and Victor E. Marx, American Dry Milk Institute, Inc., Chicago, was reelected secretary-treasurer.

45 ATTEND BEMA DINNER MEETING

CHICAGO—A dinner meeting of the Bakery-Equipment Manufacturers Assn. was held the evening of March 5 during the American Society of Bakery Engineers convention, with about 45 in attendance. Carl W. Stuhlhauer, Union Steel Products Co., Albion, Mich., president of the association, was in charge of the meeting. The recent Atlantic City baking industry exposition was discussed, and it was decided that any money surplus from this will be devoted to projects of benefit to the entire baking industry. This will be determined by the general exposition and convention committee at a later meeting. Raymond J. Walter was appointed executive secretary and treasurer. It was stated that the BEMA is looking forward to a national exposition with the Associated Retail Bakers of America in 1952.

Sales Under Wheat Agreement

Importing countries—	Guaranteed purchases	Reporting countries—total sales, 1,000 bu — United States* — Wheat	Flour	Total	Australia†	Canada†	France†	Total
Austria	11,033	3,265	984	4,249				4,249
Belgium	27,300	6,635	15	6,650		3,761		10,414
Bolivia	2,748	404	111	515		385		902
Brazil	13,228							
Ceylon	4,408				4,409			4,409
Costa Rica‡	1,101							
Cuba	7,432	14	994	1,008		2,290		3,298
Denmark	1,417					282		282
Dom. Republic	735		78	78		281		359
Ecuador	1,197		619	619		528		1,147
Egypt	8,818				4,846	1,008		5,854
El Salvador	404	33	334	367		115		482
Greece	13,736	4,491	892	5,383				5,383
Guatemala	367		287	287		210		497
Haiti	1,029		91	91		834		925
India§	38,287							
Ireland	10,104	1,405		1,405		2,172		3,702
Israel	9,144	373	383	756		1,944		2,700
Italy	46,418	3,708	786	4,494				4,494
Lebanon	2,388							
Liberia‡	37							
Mexico	9,156	6,375		6,375		350		6,725
Netherlands	25,731	14,930	2,448	17,378	1,904	498	1,470	21,250
New Zealand	4,593				22			22
Nicaragua	194		215	215		88		303
Norway	7,716	1,936	2,111	4,047	113	1,153		5,313
Panama	825		78	78		211		289
Peru	4,413	2,413		2,413		55		2,468
Philippines	7,202		221	221				221
Portugal	8,144	3,660	695	4,355		132		4,387
Saudi Arabia	1,837	37	265	302		116		414
Sweden	2,756				2,044			2,044
Switzerland	6,430					4,899		4,899
Un. of South Africa	11,083				3,000	4,480		7,480
U. K.	177,068	8,018	1,460	9,478	19,356	125,111	1,727	155,565
Venezuela	4,777		819	819		3,844		4,663
Total	456,298	58,097	14,517	72,614	32,848	154,397	3,197	261,116
Guaranteed quantities (exporting countries)				168,706	80,283	203,880	3,330	456,298
Balance				96,092	48,435	49,483	133	195,092

*Sales confirmed by CCC through March 7, 1950.
†Sales recorded by Wheat Council through March 3, 1950.
‡Has acceded to agreement but not deposited instrument of acceptance with State Department.
¶Unofficial quantities.
§Council advised of fulfillment this quota though quantities not yet recorded.

short supply. Quotations March 11: bran $57.50, shorts $58, middlings $62, net cash terms, bags included, mixed or straight cars, Toronto-Montreal.

Winnipeg: There is no change in millfeed trading. Most of the supplies from western mills are going to eastern Canada. Sales in the three prairie provinces are insignificant and there is no accumulation of supplies. Quotations: Manitoba, Saskatchewan and Alberta bran $51, shorts $54; small lots ex-country elevators and warehouses $3 extra.

Philadelphia: A firm undertone is displayed in the local millfeed market, but dealers say trading continues on a reduced basis. There are reports of a contracting supply of standard midds., but it has not been outstripped by demand. The immediate outlook is a little better since buying appears on the verge of expanding under heavier seasonal requirements. Quotations: standard bran $56, standard midds. $57, red dog $59.

St. Louis: A little interest is being shown in deferred shipments, but inquiries for nearby delivery are only fair as buyers evidently over-bought on a nearby basis fearing the coal strike would continue. Supplies of bran are ample and gray shorts supplies are more than sufficient. Quotations: bran $43.50@44, gray shorts $48.50@49.

Rye

Minneapolis: No carlot rye flour business was reported as demand continued to stress fill-in requirements. Quotations March 13: pure white patents $4@4.30, medium rye $3.90@4, dark rye $3@3.35.

Buffalo: Rye flour prices last week were up 5@10¢. Sales in Buffalo continued to be slow. Buyers were content to wait for new developments. Quotations March 11, f.o.b. Buffalo: white $4.90@4.95, dark $3.80@3.85, medium $4.70@4.75.

Pittsburgh: Rye flour prices showed a small advance last week, but this caused bakers and jobbers to defer buying other than for immediate needs. Quotations: pure white No. 1 $4.60@4.70, medium $4.40@4.45, dark $3.90@4.20, blended $5.65@5.76, rye meal $4.10@4.20.

New York: Scattered buying was done last week, but buyers' ideas held around the $4.50 mark, which was below mills' quotations. Pure white patents March 11: $4.60@4.65.

Portland: White rye $5.70, pure dark rye $4.70.

Chicago: The rye flour market continued to lag last week. Sales were extremely spotty and for prompt shipment. Directions continued only fair. White patent rye $4.25@4.30, medium $4@4.10, dark $3.30@3.70.

Philadelphia: Demand continues on a reduced scale, with bakers taking only modest amounts to meet slower production schedules. Nevertheless, prices show a firm undertone. Rye white $4.65@4.75.

St. Louis: Sales and shipping directions last week were improved. Quotations: pure white $4.70, medium $4.50, dark $3.60, rye meal $4.20.

Oatmeal

Toronto-Montreal: Movement of these products was slow last week. Quotations March 11: rolled oats in 80-lb. cottons $4.60, oatmeal in 98-lb. jutes $5.55, f.o.b. Toronto or Montreal.

Winnipeg: Trade in rolled oats and oatmeal is confined to small lots going for export. Mills are operating part time, and supplies are sufficient to take care of all buying orders. Quotations March 11: rolled oats in 80-lb. sacks $4.75@4.85 in the three prairie provinces, oatmeal in 98-lb. sacks $5.70@5.80.

Minneapolis: Bulk rolled oats were quoted at $5.39 March 13; 20-oz. packages $3.10 case, 48-oz. packages $3.35.

—BREAD IS THE STAFF OF LIFE—

COTTON GOODS INDEX 17.71

Bemis Bro. Bag Co.'s cotton goods index, a composite figure reflecting wholesale price of principal cotton cloth used in bag making expressed in cents a yard of cloth, is 17.71, compared with 17.23 a year ago. The Bemis composite figure reflecting duty paid for early shipment from Calcutta of lightweight and heavyweight burlaps expressed in cents a pound of cloth is 25.25 compared with 26.46 a year ago. The current index is based on Calcutta ceiling prices plus a permitted 5% commission.

—BREAD IS THE STAFF OF LIFE—

H. G. STINNETT, JR., TEXAS MILLER, DIES

President of Harvest Queen Mill & Elevator Co., Plainview, Succumbs to Heart Attack

PLAINVIEW, TEXAS—Horatio G. Stinnett, Jr., 62, president of the Harvest Queen Mill & Elevator Co., Plainview, died suddenly March 10 of a heart attack. Although Mr. Stinnett had suffered from a heart condition for several months, it was not regarded as acute.

Mr. Stinnett started in the flour milling business as an associate of his father, H. G. Stinnett, Sr., who was the chief owner of the Diamond Mill & Elevator Co. of Sherman, Texas. The Diamond mill was one of the oldest and largest in northern Texas and the senior Stinnett was one of the pioneers in the development of the milling industry in Texas. In 1931 the Diamond plant was sold to Kay Kimbell of Fort Worth, and was operated by the Kimbell interests for some time thereafter.

In 1932 the Harvest Queen Milling Co., which had been purchased in 1910 and greatly developed by Albert G. Hinn, former Wisconsin miller, got into financial difficulties as a result of the failure of the local bank at Plainview. H. G. Stinnett, Jr., then became associated with the Harvest Queen firm as a result of an appointment as receiver by the federal court in Dallas. The following year, he joined with Mr. Hinn and others of the company stockholders in purchasing the milling properties from the old company and became president of the new firm.

The capacity of the mill has been gradually expanded with the growth of the company and now totals 4,500 sacks, with 1,000,000 bu. wheat storage capacity.

Mr. Stinnett was well known in the milling industry. He served as president of the Texas Grain Dealers Assn. in 1946-47 and was a director of the Millers National Federation, having been elected last year.

Mr. Stinnett was a past president of the Panhandle Grain & Feed Dealers Assn., and was a director of the Ft. Worth & Denver City Railway.

Surviving are his widow and a sister, Mrs. E. L. Holsten of New York City. Funeral services were held at the First Baptist Church in Plainview, March 12, and burial took place at Sherman, Texas, March 13.

—BREAD IS THE STAFF OF LIFE—

FLOUR PRODUCTION SHOWS A DECREASE

Flour production shows a decrease of 165,520 sacks from the preceding week. Output of the mills reporting to The Northwestern Miller, representing 72.6% of the total flour production in the U.S. during November, the latest month for which census figures are available, amounting to 3,097,761 sacks compared with 3,263,281 in the previous week and 3,206,197 in the corresponding week of a year ago. Two years ago the figure was 3,093,329 and three years ago 4,095,268 sacks. There was an increase of 3,102 sacks in the Buffalo flour production. Northwest flour production decreased 25,696 sacks, Southwest 53,479 sacks, Central and Southeast 75,180 sacks and the North Pacific Coast 14,267 sacks.

—BREAD IS THE STAFF OF LIFE—

ALLIEDS TO MEET

MILWAUKEE—"Credit and Collections" will be the topic of the featured talk to the Wisconsin Flour & Bakers Allied Trades Assn.'s meeting March 17 at the Milwaukee Press Club. The subject will be covered by O. H. Berryman, credit manager John Pritzlaff Hardware Co., Milwaukee. The meeting will start with a 6:30 dinner and will include reports on the forthcoming sales clinic for bakery sales girls.

ECA Coarse Grain Exports May Fall Short of Estimate

WASHINGTON—Coarse grain exports financed by the Economic Cooperation Administration will fall short of original estimates by 40 million bushels, about one fourth of the total planned for the fiscal year ending June 30.

This information on coarse grains—corn, oats, barley and grain sorghums — is reported by government officials and is explained in this way:

The U.K. dropped out of the U.S. coarse grain market at the time it devalued its currency. And the German government cancelled out expected imports of corn to the extent of 35 million bushels after domestic crops exceeded earlier estimates.

$280 Million Budget

The original ECA budget called for the disbursement of approximately $280 million for coarse grains from the U.S. this year. This total represented about 170 million bushels of coarse grains, predominantly corn. With removal of the U.K. and Germany from the demand side, it is feared that the ECA will not finance more than 125 million bushels of all coarse grains this year.

On the basis of procurement authorizations issued through March 10, 1950, ECA has financed about $85 million worth of corn. At a price of $140 at U.S. ports, this would indicate a movement of about 60 million bushels. Exports of the other coarse grains up to the same date have amounted to about $36 million. This puts the total of ECA financed coarse grain exports up to March 10 at about $121 million.

On the basis of the dollar budget estimate of ECA for this fiscal year, a reduction of expected exports by 25% would reduce the ECA-financed quantity to about $210 million dollars.

Mostly Corn

Probable exports henceforth in terms of bushels cannot be estimated since foreign claimants have not fully made known their requirements for different grains. But it is presumed at ECA that most of the coarse grain exported from now until the end of the fiscal year will be corn.

One unexpected export dividend is found in the inquiry of Italy for approximately 3.5 million bushels of corn to meet demands resulting from a local crop shortfall.

India's Food Grain Requirements Analyzed in Government Report

LONDON—An analysis of the food grain position in India has been published under the auspices of the British government. The information given leads observers to be pessimistic about India's much publicized attempts to become independent of food imports by 1951. India is a valuable customer for grain and flour, and if the object of the government was achieved there would be a substantial reduction in markets for the foreign milling and grain exporting industries. Doubts of success have, however, been expressed by some government officials and critics have pointed out that greater effort will be needed if the target of an increased production of 10 million long tons a year is to be achieved.

The analysis quotes the report of the Bengal Famine Inquiry Commission, which stated that "Until Japan declared war, India had no serious food problems beyond the fundamental truth that two thirds of its population normally existed at a level little above the starvation line, and, by western standards, well below it. That in itself is an important fact, the effect of which is to be fully grasped before the true significance of the situation which ultimately developed can be understood.

"Its effect was that a slight disturbance of the economic practices of the country, and a small diminution of the over-all available supply, had consequences altogether out of proportion to their intrinsic gravity. So delicate was the balance between actual starvation and bare subsistence, that the slightest tilting of the scale in the value and supply of food was enough to put it out of the reach of many and to bring large classes within the range of famine."

On the basis of nutritional standards of 1 lb. of food grains for each adult daily, the annual requirements of the Indian Union in respect to food grains amount to approximately 48 million tons.

Ration Maintained

During the war and until 1946, the cereal ration of 1 lb. for each adult daily was generally maintained except for a period during 1943 in certain special areas. In 1946, however, the overall cereal ration was reduced to 12 oz. throughout the country. In the main this reduced ration was maintained during 1947, but with considerable difficulty. The position further deteriorated in the latter part of the year and over large areas the ration was reduced to 10 oz., at times to 8 oz., even to 6 oz. The Food Grains Policy Committee in its interim report on the situation in December, 1947, pointed out that "The result of every decrease in the scale of ration allowed is that the relatively small proportion of the population which is effectively rationed in urban areas tends to suffer. The demand on the free market increases.

"This widens the gap between the control price and the price actually prevailing in the free market. The tendency for the free market to convert itself into an illegal black market thereby increases. The more grain is sold in the black market, the greater the drop in procurement and this necessitates a further decrease in the scale of ration. A vicious circle is thus set up, the inevitable result of which must be increasing maldistribution of available stocks, exaggeration of such shortage as may be prevailing in parts of the country, a distorted and alarming picture of the imminence of famine entirely unjustified by the actual supply situation and general increase in the dissatisfaction of all sections of the public with the measures taken by the government to deal with the food situation."

In the years 1936-39 the average yearly production of all food grains, including wheat and rice, was 43.7 million long tons. In 1945-46 this figure dropped to 41.5 million tons and by 1946-47 to 40.9 million tons. The crop year 1947-48 resulted in a rise to 42.6 million tons. Imports have risen from 900,000 tons in 1945-46 to 2.7 million tons in 1947-48, while the figure for 1948-49 is estimated to be over 3 million tons.

Stress is laid on the fact that, in assessing the impact of this problem on the future economic position of the Union of India, due weight must be given to the effect of the division of the subcontinent into the two independent territories of India and Pakistan. India retained 77.7% of the population but only 73.1% of the total land area, 70% of the wheat acreage, 72.5% of the rice acreage and 70% of the irrigated land.

Increased Output Sought

Observers admit that the measures by which production in India can be increased and the drain on foreign exchange reduced have been given serious and urgent consideration by the government of India and by numerous committees of inquiry. At the beginning of 1947 the then central

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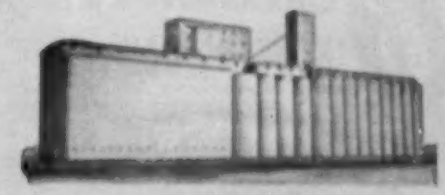

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government of all India fixed a target of 4 million tons additional cereals to be grown by 1952. The plan to increase production was by no means new, efforts having been made to achieve this end as early as 1942. The results of these measures were criticized in the final report of the food grains policy committee of 1948 as unsatisfactory. It was stated that the objectives were too diversified, the effort was inadequate and in most areas the necessary vigor and drive was lacking.

Speaking of the future, this committee indicated that the country must set before it the goal of "increasing the food grains production annually by 10 million tons within the shortest possible time with a view to removing the constant threat of scarcity, famine and helpless dependence on imports to which the country is exposed at present. We are convinced that if an all-sided effort is made to mobilize the potentialities of development, it will not be difficult to reach this target within a reasonably short period. Large-scale multipurpose projects designed to provide assured irrigation, intensive efforts to raise the productivity of the soil already under cultivation by increased use of water, manure and improved seeds, and reclamation and development of cultivable waste lands of all types must be regarded as an integral part of a comprehensive food production policy for the immediate future."

Although the government still wishes to build up a central reserve of food grains, such a reserve could not be established in 1948 because supplies to deficit areas had to be increased beyond the amounts estimated by the official forecasters.

The over-all shortage of grain in the country resulted in an excessive price rise. Contributing factors were the short fall in the outturn of rice and millet in Madras and the below average wheat crop in the crop year 1947-48. The abandonment of the rationing and control system in December, 1947, also accelerated the deterioration of the position which resulted in the steep rise in prices. Plans were accordingly made for a reimposition of controls and rationing.

The Central Government decision to make India self-sufficient in food grain supplies by 1951 is based on hopes of much more significant results from the "grow more food" campaign than have been achieved in the past. Though there are many small schemes in operation under provincial government auspices it is pointed out that the success of any food production scheme depends in the end on the ability of 300 million peasants working with the most primitive tools and on the most primitive principles, to put it into effect.

The difficulties facing the government of India appear to be immense and some observers consider that there is every prospect of an increasing rather than a reducing market for foreign grain and to a certain extent of imported flour. While the U.S. and Canada are strongly represented in the latter market efforts will have to be extended to meet the growing competition from Australia. Already the Australian millers have reduced the price of export flour in order to meet their competitors from North America, and they have announced their determination to increase their trade, not only in India but in other eastern flour importing countries.

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Ralph R. Young to Head Midwest Feed Manufacturers

KANSAS CITY—Ralph R. Young, Young & Sons Co., Hutchinson, Kansas, was elected president of the Midwest Feed Manufacturers Assn. at the business session which followed the close of the Midwest convention recently. Mr. Young succeeds Wiley Akins, Burrus Feed Mills, Ft. Worth, Texas, as head of the eight-state manufacturers group. He has served as a director of the association in past years and was a member of the general convention committee this year.

As vice president, the association members selected Edward A. Worth of the L. C. Worth Commission Co., Kansas City, who succeeds Guy Cooper, Jr., O. A. Cooper Co., Humboldt, Neb., in that post. For secretary, Ray N. Ammon of the Schreiber Mills, Inc., St. Joseph, was named to succeed Harold E. Fouts of the G. E. Conkey Co., Nebraska City, Neb. Maurice Johnson, Staley Milling Co., Kansas City, was renamed treasurer. J. D. Dean is executive vice president of the association.

By-Laws Changed

At the annual meeting the association members voted for a change in the by-laws proposed by the by-laws committee headed by R. C. Whitworth, Nutrena Mills, Inc., Minneapolis. The by-laws now provide for 16 directors to be elected for two years to represent as nearly as possible the eight states embraced in the Midwest organization, plus the retiring president who will serve as an ex officio member of the board for one year.

Four of these directors chosen by the board, plus the officers of the association, will constitute the executive committee of the organization.

The new directors chosen this year were: Guy Cooper, Jr., O. A. Cooper Co., Humboldt, Neb.; W. H. Williams, Jr., Kellogg Sales Co., Omaha; Thomas T. Hale, Nutrena Mills, Inc., Minneapolis; Clair B. Hull, Gooch Feed Mills, Salina, Kansas; Fred K. Darragh, Jr., the Darragh Co., Little Rock, Ark.; Wiley H. Culpepper, Josey-Miller Co., Beaumont, Texas; Don Gravett, National Oats Co., Cedar Rapids, Iowa, and East St. Louis, Ill.

Directors who continue in office from last year are: Jeff D. Brown, Jeff D. Brown Co., Inc., Springdale, Ark.; Lewis Drake, Humboldt (Kansas) Elevator Mills; Henderson Wilcox, F. M. Stamper Co., Moberly, Mo.; B. D. Eddie, Superior Feed Mills, Oklahoma City, Okla.; Robert E. Wendland, Wendland Grain & Feed Co., Temple, Texas; James E. Vaughn, Colorado Milling & Elevator Co., Denver; H. H. Goldman, Denver Feed Co., Denver; Edward A. Worth, L. C. Worth Commission Co., Kansas City; Leslie A. Ford, Shawnee (Okla.) Milling Co.

In appreciation of his work during the past year, Wiley Akins, the retiring president, was presented with a plaque expressing the thanks of the association and commending him for his service. The resolutions committee also expressed its appreciation to other officers and employees and to the college men of the area who participated in the various formula feed conferences throughout the year and in the convention program.

In his annual report, J. D. Dean, executive vice president of the association, called attention to the plans for the Midwest Feed Production School which will be held in Kansas City Nov. 27-29. The school will be an intensive short course in modern feed production methods and problems. In addition, various types of machinery will be on display and in operation, Mr. Dean said.

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USDA Official Urges "Integrated Attack" on Weed Problem

WASHINGTON—A well-integrated attack of all interested agencies will be necessary if the American farmer is to be freed of a costly weed burden, Dr. P. V. Cardon, Research Administrator of the U.S. Department of Agriculture, said recently in addressing the fourth annual meeting of the Northeastern Weed Control Conference in New York City. This cost runs into billions of dollars each year. The meeting is being attended by weed specialists of commercial companies, state experiment stations, and federal agencies.

Dr. Cardon pointed out that research workers today recognize weed control as "a major problem of extremely broad scope which will require for ultimate control the full-scale measures usually reserved for complete eradication programs."

Stating that in recent years new attention to the weed control problem has come from many quarters, Dr. Cardon called on agencies with facilities that could be directed toward weed control to make such work an integral part of their program.

Problems Listed

Dr. Cardon highlighted one of the fundamental problems in weed control—that of preventing their introduction on farms and ranches wherever possible and of avoiding their spread into new areas once they have been established in others. He emphasized that "our weed population has multiplied and become more disastrous because we have lacked adequate means (1) to control the movement of weed seeds in interstate commerce through shipment of hay, grains and feeds, and (2) to prevent the use of weed seeds in feeds without first destroying the germination ability of such seeds, and (3) to control the distribution and weed seeds in imported grains and roughage."

Calling attention to the fact that many of our worst noxious weeds have been introduced by such means, Dr. Cardon explained that restricting the movement of weed seeds in commercial channels is especially difficult because the controlling standards of noxious weeds are state regulations which govern the shipment of seeds into the states themselves. These regulations have been established from many different methods and bases, Dr. Cardon explained, and long experience points toward the necessity of bringing about even more uniformity in state noxious weed regulations and their application than has been effected. He also asked agencies with weed control responsibilities to use their best resources to explore all possibilities for handling obstacles to weed control.

Adequate Facilities

Dr. Cardon enumerated the research and educational facilities of USDA and other agencies concerned with the weed menace. "Individually," he said, "these resources may not seem particularly adequate, but collectively they represent an impressive research front." Explaining that the Agricultural Research Administration has the responsibility

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for coordinating and integrating USDA research activities, he said that in weed control research "we are striving to keep our programs flexible and well-integrated with related programs."

FLOUR BRANDS

The following trademarks have been published in the Official Gazette of the United States Patent Office preliminary to registration. Manufacturers and distributors who feel that they would be damaged by the registration of any of these marks are permitted by law to file, within 30 days after official publication of the marks, a formal notice of opposition.

BAULER—Haigh Smith, doing business as Sunland Biscuit Co., Los Angeles, Calif., alimentary paste products. Use claimed since June 1, 1922.

TEA TABLE—The Tabie Mills, Inc., Lincoln, Neb., wheat flour, pancake flour, corn meal, macaroni, spaghetti and noodles. Use claimed since July 3, 1919.

ENOM BOUND—Randolph Milling Co., Ava, Ill., wheat flour. Use claimed since 1911.

GOLDEN ROD—Interstate Milling Co., Charlotte, N.C., wheat flour. Use claimed since May 28, 1942.

AUNT JEMIMA—Quaker Oats Co., Chicago, Ill., pancake and buckwheat ready-mix, yellow and white cake meal, white cream corn meal, grits, wheat flour, white cornbread ready-mix, oatmeal cookie ready-mix, corn muffin ready-mix, devils food cake ready-mix, silver cake ready-mix, gingerbread ready-mix and oatmeal muffin ready-mix. Use claimed since Feb. 15, 1931.

SPEEDY-CHEF—Roman Meal Co., Tacoma, Wash., prepared pie crust mixes. Use claimed since Jan. 15, 1948.

RANDOLPH SPECIAL—Randolph Milling Co., Ava, Ill., wheat flour. Use claimed since Aug. 22, 1932.

YELLOWSTONE SPECIAL — Colorado Milling & Elevator Co., doing business as St. Anthony Flour Mills, Denver, Colo., wheat flour. Use claimed since March, 1909.

HOBBI—Peter Rossi & Sons, Inc., Brooklyn, N.Y., alimentary paste—rice, macaroni, spaghetti, noodles, vermicelli, etc. Use claimed since June 1, 1944.

JEWELL T—Jewell Tea Co., Inc., Barrington, Ill., spaghetti, noodles, macaroni, quick oats, cake and biscuit mix, wheat cereal for use as a breakfast food or as an ingredient in cookies, muffins, bread or rolls, cake flour and farina. Use claimed since 1924 on alimentary pastes, since October, 1941, for mix and wheat cereal, since October, 1941, on cake flour and since November, 1941, on farina.

MRS. RAPP'S—Dan Dee Product and Potato Chip Co., Cleveland, Ohio, noodles. Use claimed since July 1, 1925.

FEATHERLITE — Glimer Milling Co., Huntsville and Clinton, Ill., soft wheat flour. Use claimed since Oct. 1, 1941.

SPEEDY-CHEF—Roman Meal Co., Tacoma, Wash., prepared pie crust mixes. Use claimed since Jan. 15, 1948.

HI PRINTS—Midland Flour Milling Co., doing business as Halst Mill & Elevator Co., North Kansas City, Mo., assignor to International Milling Co., Minneapolis, Minn., wheat flour. Use claimed since Feb. 1, 1918.

W P P—R. A. Eckhart Milling Co., Chicago, Ill., wheat flour. Use claimed since Jan. 22, 1947.

DIA-BLENT—R. A. Eckhart Milling Co., Chicago, Ill., malted wheat flour. Use claimed since Sept. 1, 1936.

KITCHE WHEAT—Jewell Tea Co., Inc., Barrington, Ill., wheat cereal used as a breakfast food or as an ingredient in cookies, muffins, bread or rolls. Use claimed since October, 1941.

OMAR DEVILS FOOD MIX—Omar, Inc., Omaha, Neb., devils food cake mix. Use claimed since March 30, 1948.

OMAR WHITE CAKE MIX—Omar, Inc., Omaha, Neb., white cake mix. Use claimed since March 30, 1948.

LINDY'S BEST—Dudney Milling Co., doing business as Lindsborg Milling & Elevator Co., Kansas City, Mo., and Lindsborg, Kansas, wheat flour. Use claimed since April, 1936.

A-O-CHOCK—A-O-Chock Foods, Inc., Nacogdoches, Tex., and [illegible], N.Y., corn muffin mix, gingerbread mix and devil's food mix. Use claimed since Oct. 1, 1939.

THE MAGIC MILLER'S BEST—Robert M. Peck, doing business as Peck Bros. and Superior Flour Co., Little Rock, Ark., wheat flour. Use claimed since July 15, 1938.

TIKE—The Cream of Wheat Corp., Minneapolis, Minn., wheat cereal food for human consumption. Use claimed since Nov. 1, 1948.

FINE FEATHERS—Wall Rogalsky Milling Co., McPherson, Kansas, wheat flour, namely, bleached self-rising, bleached phosphated, bleached phosphated enriched and bleached self-rising enriched wheat flour. Use claimed since Sept. 27, 1941.

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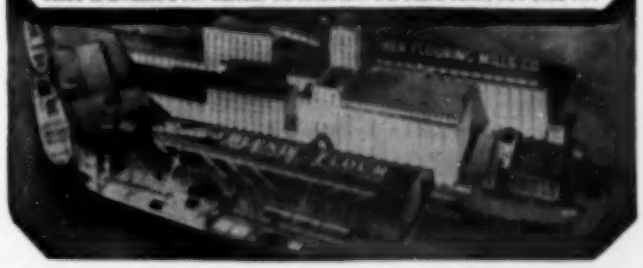

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The big business man had died and gone to—well, not to Heaven. But hardly had he settled down for a nice long smoke when a hearty hand slapped him on the back, and into his ear boomed the voice of a persistent salesman who had pestered him much on earth.

"Well, Mr. Smith," chortled the salesman. "I'm here for the appointment."

"What appointment?"

"Why, don't you remember?" the salesman went on. "Every time I entered your office on earth you told me you'd see me here!"

◆ ◆ ◆

Employer: "For this job we want a responsible man."

Applicant: "I'm the guy you're looking for. Everywhere I've worked, when something went wrong they told me I was responsible."

◆ ◆ ◆

"Which would you rather give up, wine or woman?"

"It depends on the vintage."

◆ ◆ ◆

The executive had been without a secretary for weeks. The employment office notified him that its psychologist was going to examine several candidates and invited him to come down and watch.

The psychologist called in the first girl and said sharply, "What's two and two?" The girl replied promptly, "Four." The second girl thought for a moment, suspecting a catch, and said, "Twenty-two." The third applicant answered, "Four, but it could be 22."

After they had gone, the psychologist turned to the executive. "Those tests were very revealing. The first girl has a conventional mind. To her, two and two is always four. The second girl has imagination. She realized it might be 22. The third girl is a combination of both. She's practical and at the same time has imagination. Clearly she will make the best secretary. Now, which would you like?"

The executive said without hesitation, "I'll have the blonde."

◆ ◆ ◆

Guest (phoning down from his hotel room): "Is this the desk clerk?"

Clerk (in bad humor): "Well what's eating you now?"

Guest: "That's what I'd like to know."

◆ ◆ ◆

Matron (to maid who has just given notice): "Haven't we always treated you as one of the family?"

Maid: "Yes, ma'am, you have and I can't stand it any longer."

◆ ◆ ◆

Visitor: "Yes, I liked the service in your church very much. But one thing puzzled me; why does the congregation hurry out so quickly after the benediction?"

Native: "Well, sir, the sexton makes them leave their umbrellas in the vestibule, and those who get out late haven't much of a choice."

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CONVENTION CALENDAR

March 15—Joint meeting, Districts 3 and 6, Association of Operative Millers, Battle Creek, Mich.; sec., A. L. Borchardt, Ralston Purina Co., Battle Creek.

March 24-25—District 7, Association of Operative Millers, Oklahoma City, Okla.; sec., Harold Cook, 3330 Elm St., Dallas, Texas.

March 25—District 8, Association of Operative Millers, Hotel Markeen, Buffalo, N.Y.; sec., Charles Wagner, Russell-Miller Milling Co., Buffalo.

April 10-11—Iowa Bakers Assn., Hotel Fort Des Moines, Des Moines; sec., Charles E. Forsberg, 1420 Mulberry, Waterloo, Iowa.

April 12-14 — Southern Bakers Assn., Veney Park Hotel, St. Petersburg, Fla.; sec., E. P. Cline, 700 Henry Grady Bldg., Atlanta 3.

April 14-15—Oklahoma Grain & Feed Dealers Assn., Skirvin Hotel, Oklahoma City.; sec.-treas., E. R. Humphrey, 602-04 First National Bank Bldg., Enid.

April 16-18—Texas Bakers Assn., Plaza Hotel, San Antonio; sec., Charles Neuman, Sr., Holsum Bread Co., Inc., Fort Worth.

April 17-19 — Pacific Northwest Bakers, Multnomah Hotel, Portland, Ore.; sec.-mgr., Roger Williams, 1139 Jefferson St., Salem.

April 19: South Dakota Bakers Assn., Cataract Hotel, Sioux Falls; sec., Lex Quarnberg, Tri-Sate Milling Co., Rapid City, S.D.

April 20-22—California Hay, Grain & Feed Dealers Assn.; Biltmore Hotel, Los Angeles; sec.-treas., I. J. Stromnes, Blue Anchor Bldg., 1400 10th St., Sacramento 14.

April 21-22—Self-Rising Flour Institute, Inc., Buena Vista Hotel, Biloxi, Miss.; sec., Allen R. Cornelius, 1214 Nashville Trust Bldg., Nashville 3, Tenn.

April 23-25 — Heart of America Bakers Convention, Arkansas, Kansas, Missouri, Nebraska and Oklahoma bakers' associations, joint convention; Hotel President, Kansas City, Mo.; general convention chairman, James S. Chase, Golden Krust Baking Co., Manhattan, Kansas.

April 24-25—Nebraska Grain & Feed Dealers Assn.; Hotel Paxton, Omaha, Neb.; sec.-treas., Howard W. Elm, Lincoln.

April 28-29—Texas Grain & Feed Dealers Assn.; Hotel Galvez, Galveston; sec.-treas., G. E. Blewett, Blewett Little Grain Co., Fair Blvd., Ft. Worth.

April 30-May 2—Tri-State Bakers Assn., convention, Jung Hotel, New Orleans, La.; secretary, Sidney Baudier, Jr., 401 Board of Trade Bldg., New Orleans.

May 1-5—Association of Operative Millers, Hotel Jefferson, St. Louis, Mo.; sec., Donald S. Eber, 620 Board of Trade Bldg., Kansas City 6.

May 2-3—Panhandle Grain & Feed Dealers Assn., Herring Hotel, Amarillo, Texas; sec., Joe S. Morris, P.O. Box 366, Amarillo.

May 5-6 — Kansas Grain, Feed & Seed Dealers Assn., Hotel Kansas, Topeka, Kansas; sec., O. E. Case, 823 Wiley Bldg., Hutchinson.

May 7-9—Illinois, Indiana and Wisconsin bakers' associations, joint convention, Sherman Hotel, Chicago; act. sec., Thelma Dallas, 53 W. Jackson Blvd., Rm. 738, Chicago 4.

May 7-9—National Association of Flour Distributors, Hotel Statler, Boston; sec.-treas., Wayne G. Martin, Jr., The Northwestern Miller, 23 Beaver St., New York 4.

May 10—Kentucky Master Bakers Assn., and Memphis Master Bakers Assn.; Frankfort, Ky.; sec., Kentucky Master Bakers Assn., M. J. Fleischacker, 919 Monmouth St., Newport, Ky.

May 14. — Flour Millers Export Assn.; Edgewater Beach Hotel, Chicago, Ill.; sec., Helen Gervais, National Press Bldg., Washington, D.C.

May 14-16—New York State Assn. of Manufacturing Retail Bakers; Hotel St. George, Brooklyn; sec., Percy Stelle, 2 Broadway, New York 4.

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Western Star Mill Co. 2
White & Co. 38
Whitewater Flour Mills Co. 24
Wichita Flour Mills Co. 6
Williams Bros. Co. 15
Williams, Cohen E., & Sons 38
Williams, H. B., Mill Supply Co. 24a
Wittenburg, M., Jr.
Wolcott & Lincoln, Inc. 19
Wolf Co.
Wolf Milling Co. 34

There's a Coach...
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Just as the third-base coach in baseball guides the runners with his experienced judgment, so will the N-A Flour Service Division help you with your flour treatment problems. With over twenty-five years' experience in bleaching, maturing, and enriching flour, they will handle these processing operations with ease and efficiency.

The N-A Servicemen, highly trained and thoroughly competent, will frequently inspect your mill to ensure that the time-tested N-A products are most effectively applied. With their extensive knowledge of flour milling, they can quickly spot and correct potential sources of trouble and thus prevent costly last minute emergencies.

The N-A laboratories and staff, a vital part of the service, will gladly work with you and your consultants on any problems involving bleaching, maturing, or enriching.

Call your nearest N-A Representative. He will quickly show you how the N-A Flour Service Division, with its servicemen and laboratory staff, can be your "coach" and thus help you score "winning runs" in flour milling.

WALLACE & TIERNAN COMPANY, INC., AGENTS FOR

NOVADEL-AGENE

BELLEVILLE 9, NEW JERSEY

NA-40

DYOX
for flour maturing

NOVADELOX
for a whiter, brighter flour

N-Richment A
for uniform enrichment

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Disaster in the Dakotas . . .

Remember January, 1949—when a marathon blizzard swept the entire Midwest? In the Dakotas, Nebraska, and Wyoming, highways and railroads were blocked by drifts as high as 20 feet. Farms, ranches, and small communities were cut off from the outside world.

Then the Red Cross, with military and civilian relief agencies, moved into the stricken area. In a few brief days 197 airplanes flew 3,556 Red Cross-chartered missions of mercy, bringing food and supplies to some 31,000 people.

Last year the Red Cross assisted in more than 300 other disaster relief operations . . . floods, fires, famine and earthquakes.

But disaster relief is only one of the many services provided by the Red Cross. Lifesaving classes, First Aid instruction, aid to veterans, service in military hospitals and canteens—all are a part of the far-reaching Red Cross program.

No one knows where or when the *next* disaster may strike. But everyone knows that wherever it may be, whatever the need—the Red Cross will be there. One thing makes all these services possible—your contribution to the Red Cross Fund. Give all you can—for the need is great.

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General Mills
IN COOPERATION WITH
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The Northwestern MILLER

MILLING PRODUCTION SECTION

The Treatment of Railway Boxcars With Insecticidal Sprays—a Preliminary Test

By R. T. Cotton, J. C. Frankenfeld and L. M. Redlinger

Bureau of Entomology and Plant Quarantine

Agricultural Research Administration, U.S. Department of Agriculture

INSECT infestation picked up by flour shipments during transit in railway boxcars is a problem of concern to millers, bakers and railroads. Railway cars are so constructed that it is impossible by mechanical means to remove all insects that become established in accumulations of waste grain, milled cereals, or other dried-food products behind end linings and side linings, in cracks between floor boards, or in like places. The transportation of infested grain or other infested food products in these cars continually replenishes these insect colonies. It has also been demonstrated that cleaning cars with compressed air or fumigating them fails to destroy all the insects established in them. When infested cars are loaded with fresh flour, insects from the woodwork or from accumulations of foodstuffs behind the car linings are quickly attracted to the flour.

In recent years residual sprays have been found exceedingly useful for the eradication of insects that have become established in the woodwork of grain bins, warehouses, and similar places.

In consequence, many milling companies apply such sprays to railway boxcars before they are lined with paper and loaded with flour. The efficiency of these treatments has been difficult of appraisal, since they are not conducted under controlled conditions and their success or failure is necessarily determined by the complaints or lack of complaints received from the consignee after the shipment has arrived.

In order to determine the value of various insecticidal sprays available and apparently suitable for practical use in boxcars, a test was conducted in cooperation with railway and milling interests, during September, 1946. Although the results of this one limited trial cannot be considered at all conclusive, they are presented herein for such interest and value as they may be to those concerned with the prevention of flour from becoming infested with insects while in transit.

A group of 16 boxcars* that were likely to have a heavy natural infestation of insects were placed on a siding at Topeka, Kansas. None of the cars were cleaned before the spraying other than by the sweeping out of heavy accumulations of waste material from some of the cars. They were further infested by the release in each car of approximately 3,000 living insects of the following types: larvae of the Mediterranean flour moth, and adults of the rice weevil, the saw-toothed grain beetle, the confused flour beetle, the lesser grain borer, and the cadelle. These insects were scattered over the floor of the car 24 hours before the cars were treated, to allow them to become established in the woodwork and behind car linings.

In prior tests the residual spray deposits resulting from the fogging of railway cars were not substantial enough to have a very high insecticidal value against stored-grain insects, whereas the larger particle size of sprays applied by a knapsack-type sprayer or a power sprayer produced a residual deposit of high insecticidal

(Continued on page 28a)

*Furnished through the courtesy of the Santa Fe Railway Co.

Table 1—Number of insects found in flour exposed in railway boxcars treated with various sprays and aerosols. Four bags examined at end of each exposure period.

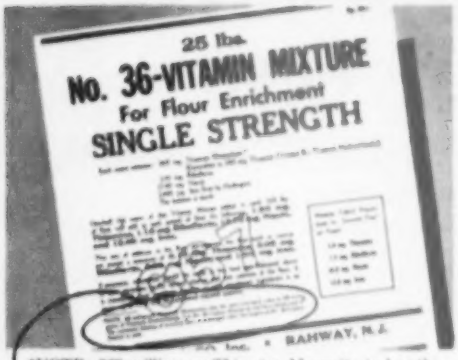
Formula applied	Days flour was exposed in car	Flour beetles: Larvae	Flour beetles: Adults	Lesser grain borer: Adults	Cadelle: Larvae	Flat grain beetle: Adults	Rice weevil: Adults	Saw-toothed grain beetle: Adults	Number of bags infested
Pyrethrum 2%	3	0	0	0	0	0	0	0	0
piperonyl butoxide	7	0	0	0	0	0	0	0	0
ide 2% in odor	10	1	0	0	0	0	0	0	1
ione kerosene	11	0	0	0	0	0	0	0	0
in emulsion	3	0	0	0	0	1	1	0	1
	7	1*	0	0	0	0	1	0	1
	10	0	0	0	0	0	1	0	1
	14	0	0	0	0	0	0	0	0
Chlordane 5% in emulsion	3	1	0	0	0	0	0	0	1
	7	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0
	7	0	1*	0	0	0	0	0	1
	10	0	0	0	0	0	0	0	0
	14	0	0	0	1*	0	0	0	1
Aerosol, 1 qt.	3	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0
1 qt.	3	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0
Lindane 8% in odorless kerosene	3	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	14	0	1	0	0	0	0	0	1
	3	0	0	0	0	0	0	0	0
	7	0	1	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	14	0	12	0	0	0	0	0	1
Toxaphene 5% in emulsion	3	0	1	0	0	0	0	0	1
	7	1*	0	0	0	0	0	0	1
	10	0	0	0	0	0	0	0	0
	14	1	0	0	0	0	0	0	1
	3	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0
DDT 5% as wettable powder in suspension	3	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	10	1*	0	0	0	0	0	0	1
	14	1	0	0	0	0	0	0	1
	3	0	1*	0	0	0	0	0	1
	7	1*	0*	0	0	0	0	0	1
	10	0	1*	0	0	0	0	0	1
	14	0	1	0	0	0	0	0	1
Methoxychlor 5% as wettable powder in suspension	3	1	0	0	0	0	0	0	1
	7	1*	1*	0	0	0	0	0	1
	10	1	0	0	0	0	0	0	1
	14	1	1	0	0	0	0	0	1
	3	1	1*	0	0	0	0	0	1
	7	1	1*	0	0	0	0	0	1
	10	1	1*	0	0	0	0	0	1
	14	1	1*	0	0	0	0	0	1
Check, untreated	3	0	0	0	0	0	0	0	0
	7	0	1	0	0	0	1	0	1
	10	0	1	0	0	0	1	0	1
	14	13	132	17	0	0	1	0	1
	3	0	1	0	0	0	0	0	0
	7	0	1	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	14	17	1	2	12	1	0	0	1

*Dead; 11 dead; 13 pupae. †See text for formulation.

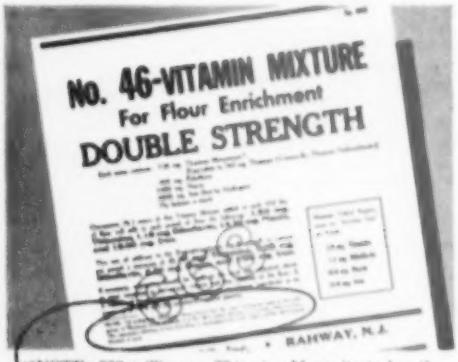
ANOTHER REASON FOR MERCK LEADERSHIP...

Thiamine Mononitrate Merck

A Major Contribution to the Enrichment Program



*NOTE: 369 milligrams Thiamine Mononitrate has the same biological value as 380 milligrams of Thiamine Hydrochloride. Use No. 36-Vitamin Mixture as you have always used it. The customary labeling of enriched flour is unchanged when this improved No. 36-Vitamin Mixture is used.



*NOTE: 738 milligrams Thiamine Mononitrate has the same biological value as 760 milligrams of Thiamine Hydrochloride. Use No. 46-Vitamin Mixture as you have always used it. The customary labeling of enriched flour is unchanged when this improved No. 46-Vitamin Mixture is used.

MERCK & CO., Inc.
Manufacturing Chemists RAHWAY, N. J.

A MORE STABLE FORM OF THIAMINE

All Merck Vitamin Mixtures for Flour Enrichment now contain Thiamine *Mononitrate!* With this *improved form of thiamine*, the vitamin B_1 content of enriched flour will be retained *more completely* —even under the adverse conditions of temperature and humidity experienced in shipping and storage.

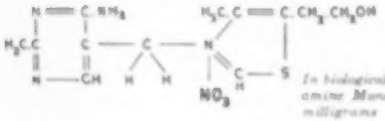
COMPLETELY NEW BUT COMPLETELY TESTED

This new feature of Merck Enrichment Mixtures brings to American millers a degree of protection hitherto not available. Thiamine Mononitrate in enriched flour was first thoroughly investigated in collaboration with leading cereal chemistry laboratories. In addition, extensive commercial experience and rigorous field tests confirm that enrichment of flour with Thiamine Mononitrate represents *a signal improvement.*

NO CHANGE IN LABELING REQUIRED

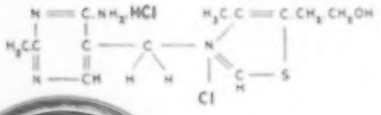
Thiamine Mononitrate meets every requirement for thiamine under the Federal Standards of Identity for enriched flour. No need for change in the labeling on bags or packages to comply with Federal requirements.

Adequate stocks of Merck Enrichment Mixtures are available at all warehouse points.



Thiamine Mononitrate $C_{12}H_{17}N_5O_4S$ (molecular weight 327.36).

In biological activity, 1 milligram of Thiamine Mononitrate is equivalent to 1.03 milligrams of thiamine hydrochloride.



Thiamine Hydrochloride $C_{12}H_{17}ClN_4OS.HCl$ (molecular weight 337.27).

MERCK

STOCKS ARE CARRIED AT: Buffalo, N.Y. • Rahway, N. J. St. Louis, Mo. • Dallas, Texas • Knoxville, Tenn. Nashville, Tenn. • Philadelphia, Pa. • Chicago, Ill. Seattle, Wash. • Kansas City, Mo. • Los Angeles, Calif. Oklahoma City, Okla. • Ogden, Utah • Denver, Colo.

Merck Enrichment Mixtures

The Golden Era of Milling in the U. S.

By W. D. Gray

Editor's Note: The accompanying article is reprinted from The Northwestern Miller of 50 years ago and is one of a series written by Mr. Gray under the title of "A Quarter Century of Milling." The quarter century referred to was the period 1875-1900, a period of many changes in milling machines and techniques. In this article, the author, an eminent milling engineer, relates some of the details of the legal battle over patent rights of the middlings purifier.

* *

THE purifier fight was not wholly between Smith and La Croix, for while they were continually at war, Benjamin Barter was in the patent office and he and Smith were put in interference in 1872. In view of what Smith claimed, Barter's testimony is interesting. This patent of Barter's that was in interference was No. 125,518, and the claims are as follows:

No. 125,518: Method of Dressing Flour.—Benjamin Barter, Faribault, Minn.

Claim 1: The method herein described of dressing flour, by means of an upper shaker provided with cloth of different degrees of fineness arranged transversely for grading and bolting, and a lower shaker, divided into longitudinal sections with cloth of the same fineness in each section, but differing in fineness from each other for receiving the different grades of flour, in connection with a fan or its equivalent, for producing an air-current, as set forth.

Claim 2: In a flour-dressing machine, a shaker, K, divided into longitudinal sections, with cloth of the same fineness in each section, but differing in fineness from each other, for receiving and bolting different grades of flour, as herein described.

Claim 3: The combination of the shakers D and K with the brushes G and M, constructed and arranged to operate substantially as and for the purpose set forth.

Claim 4: The combination of the shaker K and adjustable partition T, when constructed and arranged to operate substantially as and for the purpose set forth.

Claim 5: The combination of the fan U, zigzags cloth V, zinc cover A, and shakers D and H, when constructed and arranged to operate substantially as and for the purpose set forth.

Claim 6: In combination with fan U and shakers D and K, the box W, provided with slide valves K therein, for the purpose of regulating the air-currents, as set forth.

This patent contains the grading sieve across and above the lower sieves, for the purpose of grading the middlings on to the lower sieves, also the traveling brush, or in other words, everything that Smith claims in his double machine.

Some of Barter's Testimony

It will be necessary to recite some of Barter's testimony to show where, when and how he invented this machine; it is given as follows, being in reply to a question as to the facts relative to his invention of the flour-dressing machinery mentioned and described in the letters patent No. 125,518, dated April 9, 1872, granted to him:

"In 1866, about September of that year, at Wolverton Mills, England, I invented a machine for cleaning middlings. The machine was constructed with a bolt-reel, with coarse and fine bolt cloth, through which the middlings passed, and were graded with the different numbers of cloth on to a reciprocating shaker, placed at right angles underneath. The shaker was divided into four compartments, each compartment having cloth to correspond with the cloth or bolt in the reel above it. Each section of this shaker had a separate chamber over

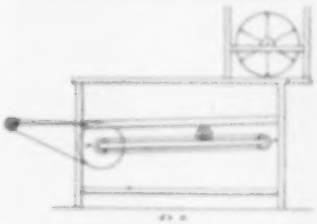


Exhibit A

it through which the air passed. Each section was provided with a slide or valve to moderate the air. A fan was conveniently placed to draw the air through several sections of the shaker and the chambers above the shaker. I built a canvas room into which the fan discharged the dust and offal sucked from the middlings.

"Beneath the shaker, I applied a revolving brush to keep the cloth clean, which traveled, and was made to revolve, by means of an endless belt, as appears by a drawing marked Exhibit A, hereto attached, and made a part of this deposition. The shaker was hung upon four springs, and the whole machine driven by a belt. I put this machine in the northeast end of the fourth floor of the Wolverton Flouring Mills, England, about New Year's, 1867, and operated it therein about nine months.

"About October, 1867, I took the machine down and took it to pieces, and did not operate it any more in England. I first came to this country in May, 1868. In Chicago I commenced to build a middlings cleaning machine, also a smut machine for wheat. I had suitable patterns made for the two machines. These patterns were lying in Preble's foundry, in Canal street, Chicago, when the foundry was burned in the summer of 1869. I filed a caveat on the smut mill. The middlings cleaner was built on the same principle as the one described as invented in England. The completion of these machines was interrupted and prevented by the burning of the patterns. I spent $1,000 in Chicago in building and experimenting on the two machines. I was obliged to abandon the further prosecution of the enterprise at that time, for want of means. In December, 1869, I went to Fountain City, Wis., to run a mill for Mr. Sherman of Milwaukee. About February, 1870, I left Fountain City and came to Minnesota. In May, 1870, I came into the employ of Bean, Bangs & Co., at Faribault, Minn., in charge of their mill. In August, 1870, I undertook to reorganize the mill with new machinery throughout, putting in three new pairs of millstones, changing the situation of two old pairs of stones. I put in new water-wheel flumes and two new water-wheels. Among my new machinery arrangements was my middlings cleaner and smutter, which I invented as heretofore described. I made drawings of the entire machinery and its relative position in the mill.

Sieve-cleaning Brushes

"Exhibit B, hereunto attached and made part of this deposition, illustrates my new middlings separator, and it was presented to the proprietors of said mill for their approval or rejection in thus reorganizing said mill. This exhibit is the identical drawing shown them at that time in August, 1870.

"In this drawing I have four revolving brushes instead of one, having

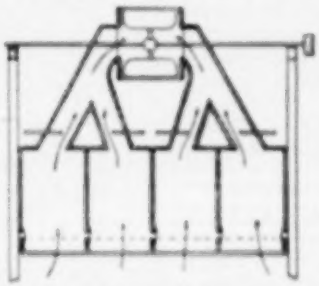


Exhibit B, Figure 1

also a traveling motion by means of a crank and connecting pitman on a toothed rack. That is, the pinions on the end of the brushes run on a toothed rack. These brushes are to keep the cloth clean on the underside of the shaker. The shaker is divided into four sections, with a separate air chamber over each section, having a valve fitted to the upper side of each air chamber to moderate the draft of air upon each, produced by the suction fan, which was attached for that purpose. A bolt reel, divided into four sections, clothed with coarse and fine cloth to correspond with each section of the shaker, was constructed at right angles above the shaker, to divide the middlings into four grades and drop the same into hoppers or pockets, to be conveyed separately to each section of the shaker. Two conveyors lying side by side and having a movable division board between them, for the purpose of carrying either the fine or coarse middlings to any point desired were also constructed beneath the shaker.

"Thoughts and suggestions concerning this middlings separator were presenting themselves to me, and in May, 1871, I made some alterations, substituting an upper shaker in place of a revolving reel, clothed with six kinds of cloth each of different number, the finer number being placed at the head and growing coarser toward the tail of the shaker. This shaker was clothed with transverse sections of cloth, for the purpose of grading the middlings into six packets, which fed the middlings into six separate sections in the lower shaker. A separate air chamber was constructed above each of the six sections in both the upper and lower shakers; by means of a suction fan placed over the machine or at convenient places, the air was made to pass up through each section of the cloth, up through each air chamber separately, and modulated in each chamber by means of a valve or gauge placed over each air chamber. I constructed two conveyors side by side with an adjustable division board between them.

"At this time I also substituted for the revolving traveling brush, a straight reciprocating brush, operated with crank and pitman, to keep the cloth clean on the upper and lower shaker.

"On or about the first of May, 1871, I commenced to make the model with an upper and lower reciprocating shaker like the machine I have described. The upper shaker of transverse sections and the lower shaker of longitudinal sections; a separate air chamber was constructed over each section of the shakers. I fitted the model with revolving traveling brushes, also two conveyors and adjustable division board. In the course of the summer (about the latter part

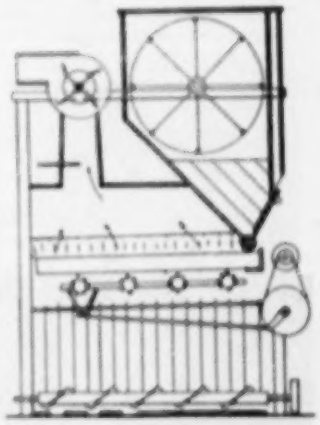


Exhibit B, Figure 2

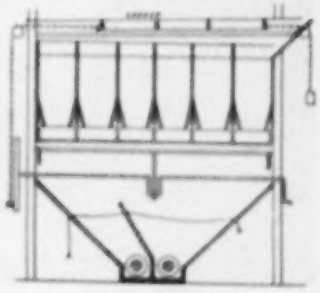


Exhibit B, Figure 3

of May) I found that my traveling brushes occupied too much room, and I discarded them and at the first opportunity substituted the straight reciprocating brush, as shown by Exhibits C and D, hereto attached and made part of this deposition. Exhibit

C being a draft of the cross-section of the machine, and Exhibit D being a side view of the machine. Exhibit A was drawn in 1866; Exhibit B in 1870; Exhibit C was made in May, 1871, Exhibit D at the same time, to-wit: May, 1871.

"In June following I conceived and carried out the idea of covering the lower shaker with zinc or wood, through which the air was to be drawn from each section and afterwards to pass up through each separate air chamber placed over each section, and each air chamber being fitted with a valve or gauge to moderate the force of air drawn by the suction fan through such sections. The machine was also fitted with a canvas bottom or strainer to strain the air from the offal. I added these improvements to the model and completed it in November, 1871. I exhibited this model to my employees from time to time during its progress."

Note 1866 as Time of Invention

It will be seen from his testimony that he claims to have invented this machine in England in 1866, gives the name of the mill that he put it into, and where it ran for some time. In his examination he goes on to show by his cuts and drawings not only how the machine was made in detail, but also submits diagrams of the mill, showing the exact location in this mill. An unprejudiced reader would be quite likely to believe such testimony. So far as I know, there was no one sent to England to make an investigation as to the truth of the testimony.

These sketches show plainly the

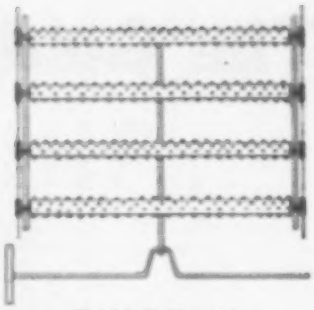


Exhibit B, Figure 4

double machine described as Smith's third and fourth improvement. It shows both the reel and the sieve, used as a grader over the lower sieves. It shows the brush in the form of both rotary and reciprocating; and that long before Smith's advent at the Washburn mill in Minneapolis. It would be tedious and useless to give all the testimony and drawings in this case, but a few extracts will show the drift of things at that time.

Q. What is the difference between the La Croix machine and yours?

A. The La Croix machine has a shaker and a suction fan and a conveyor and a brush. I do not know as I can state any further about the La Croix machine, only that it has what I call draw shelves above the

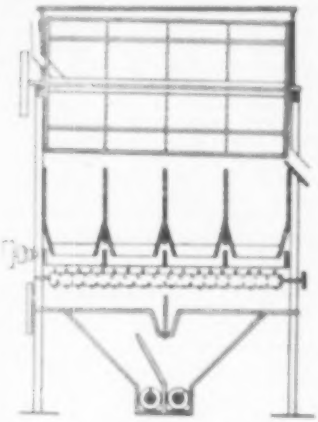


Exhibit C

shaker. My own machine has two shakers, one above the other, at right angles, a feed roller attached to feed each shaker. My shakers are in sections or compartments, with a separate air chamber over each section, with four reciprocating brushes to each shaker. A suction fan to draw air through each compartment of the shakers. Two conveyors with an adjustable division board between them, and a separate division board beneath each section of the upper shaker.

These questions and answers are simply to show that Barter regarded Smith as infringing his patents, and that he notified Ames & Sons of Northfield, Minn., and implied that he would hold them accountable.

George H. Christian testified in this case, after fully describing the double machine placed in his mill. He said this machine was called the double machine. It was commenced in May, 1871, and finished in five to eight weeks. Mr. Christian testified as follows:

Mr. Christian Claims Idea

Q. Who devised this machine?

A. I did.

Q. What Mr. Smith did upon it was

NATIONAL SURVEY SHOWS:
DAY EQUIPMENT
the predominant choice
OF MILLS & ELEVATORS

A recent survey conducted by an independent research organization showed DAY equipment to be the predominant choice of mills and elevators.

Designed to establish The DAY Company's competitive position in these markets, this survey asked a representative group of mill and elevator personnel "To what firms would you probably send inquiries if your company were planning to buy the various pieces of equipment listed below?"

Fifteen different equipment items—only five of which are manufactured by The DAY Company—were listed in the survey. The additional ten items were included to eliminate any possible bias.

Results for the five classifications of equipment manufactured by The DAY Company are graphically represented at the right. These show The DAY Company either ranked first or tied for first in four of the five classifications.

Dust Control Equipment
DAY Co. 48.2%
Co. A 4.7%
Co. B 4.7%

Steel Storage Bins
DAY Co. 50.8%
Co. A 6.2%
Co. B 3.1%

Steel Spouting
DAY Co. 16.0%
Co. A 12.0%
Co. B 10.0%

Steel Elevator Legs
DAY Co. 10.5%
Co. A 10.5%
Co. B 9.3%

Industrial Blowers
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Proof that DAY leads the field in dust control is shown by a margin of preference ten times greater than that of the next manufacturer. Since 1881 DAY engineers have maintained dust control leadership by constantly improving equipment through research and experimentation.

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The Forster . . . ALFALFA SEPARATOR

Dehydrators know the value of carotene and protein. They also know it costs no more to store high protein meal. Very often the Forster Separator will return its cost in processing one cutting of low protein alfalfa. The texture, color and general appearance are also improved through this separation. This can only mean extra profit.

Plant operators have long felt the need for a means of building up the protein in some of their runs. The Forster Separator will separate the higher protein leaf meal, thus permitting the plant to build a meal of any desired potency, finish and appearance. Wherever the Forster Separator is installed, plant operators report satisfaction.

Most any farmer can grind alfalfa hay and most any dehydrator can produce a fair quality meal but the plant with a Forster Alfalfa Separator can build high protein, high carotene meal from very ordinary raw material. The premium paid for this high potency product will soon offset the cost of the Forster Separator.

The Forster Separator, like all Forster machines, is constructed to give the greatest possible volume with the lowest power consumption. This is accomplished by Forster's exclusive process and over 20 years of manufacturing know-how in the milling machinery business. Ask for location of nearest installation.

Write for details on Hammermills, Finishers, Dusters, Scourers and Special Order Construction Jobs

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Machines for Modern Milling - - -

under your direction and as your employee, was it?

A. It was. The machine was made under my instructions.

Q. Did George T. Smith have anything to do with inventing the said double machine, and if not, who did invent it?

A. Mr. Smith had nothing to do with the devising and invention of the machine, further than the application of brushes to it, which were put on by my order, but the brushes had already been invented by Smith and applied to a machine built prior to this, called the La Croix machine. I devised and invented the double machine, except as to the brushes. I mean that I invented the double machine, so far as it differed from the first machine, known as the La Croix.

From these answers and much other testimony that might be quoted, it would seem very reasonable to suppose that Mr. Christian invented the double machine that was put in the Washburn mill. I think there can be very little doubt about it.

During the taking of this testimony in Minneapolis, Smith obtained postponements from time to time; not because he had not had enough time already, but, as Barter thought, that he wanted to manufacture evidence to suit the circumstances, and otherwise make it as expensive as possible, as Barter was a poor man. Mr. Barter said that he could ill afford to sustain the expense and loss attendant upon a protracted continuance of the contest, and that he regarded the extensions asked for as needless and vexatious.

"They also desire to state," Mr. Barter averred, "that no intimation has been given them as to the nature of the testimony which Mr. Smith hopes to obtain by delay; nor, whether, should further time be granted, the case would at the expiration thereof be subject to no delays.

"In connection also they wish to insert a card caused to be published by George T. Smith in the Daily (Minneapolis) News of the date of Feb. 1, 1873, and also an editorial in said paper, which said editorial, the editor informs Mr. Barter, was written and procured to be published by Mr. Doubleday, his (Smith's) counsel, and the publication of which, as said editor informs the counsel of Mr. Barter, was paid for by Smith, which seems strongly to indicate that neither Smith nor his counsel feels that there is any further occasion for delay."

The extract from the Minneapolis Daily News reads as follows:

The Middlings Machines Litigation

"The litigation over the middlings machines which have made so great an improvement in Minneapolis flour during the past year or two is still progressing.

"We learn that the New Yorkers have gone home; whether they were disgusted with the fight or the weather, we don't know. Mr. Smith and Mr. Doubleday, his Washington attorney, still stick to their grip and act as though they proposed to fight it through the winter.

"From an advertisement which we publish today, it would seem as though Mr. Smith and Mr. Pray had made an arrangement 'heads-I-win, tails-you-lose' description and secured the right to themselves to build machines, let the present suit go as it may.

"This advertisement makes the thing look like a conundrum, for if Mr. Smith has obtained the right to use the Barter patent, what is all this long fight about? We give it up."

A Circular by Mr. Christian

The following circular will give a good idea of the contentions then going on in the purifier business:

A Circular to Millers — Janney's Middlings Purifier, Manufactured by Minnesota Iron Works Mill-Furnishing Establishment, Minneapolis.

On the inside page will be found a statement from George H. Christian in regard to the machine we manufacture, and which we think shows pretty conclusively where the middlings purifier sprang from, and how much claim the different parties have to being the original inventors of the said machine.

Office of
GEORGE H. CHRISTIAN & CO.
Proprietors of the
Washburn Flouring Mill,
Minneapolis, Oct. 15, 1872

Messrs. Charles M. Hardenbergh & Co.
Proprietors of the Minnesota Iron Works, Minneapolis, Minn.

Gentlemen:

We have in our mill several of the machines for cleaning middlings which you manufacture, called Janney's Middlings Purifier, which are giving perfect satisfaction, and are unsurpassed by any other machine for the same purpose. We have in our mill one of the machines called Smith's Improved Middlings Purifier, also the first machine made by La Croix, and we consider them both inferior to yours in the method of keeping the cloth clear, while yours is fully equal in every particular. As an erroneous impression is trying to be conveyed to the public as to the invention of this machine and the patent rights obtainable for the same, I would give for general information, its history; its being in our mill the machine was first introduced.

In the spring of 1870, Mons. E. N. La Croix described the machine to me, saying it had been used for years in France, where he had seen it running, and a bargain was concluded with him by me for the erection of one as an experiment. After many delays Mr. La Croix finished the machine and set it running about March or April of 1871. The machine constructed by him was a reciprocating bolt (bolting cloth stretched in a

A NEW Leather Belt

...for ROLL and SIFTER DRIVES

Made especially for flour mills, Rhoads Flour Mill Belt is of medium-heavy weight . . . two-ply thickness and waterproof . . . designed to increase the efficiency of your roll mill and sifter drives—offers less stretch, low slip and longer, more productive life. All inquiries about this new Flour Mill Belt will be answered promptly.

PRODUCERS OF FINE LEATHER FOR 248 YEARS
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plane upon a frame shaken back and forth), suspended upon hangers and oscillated by an eccentric in a yoke, with different numbers of cloth graded from the head to tail, and a draft of air made to ascend through the cloth by a fan above, a roller to feed the middlings slowly and evenly on the cloth and shelves in upper part of machine to catch the fine dust, the cloth and frame holding it enclosed in a tight case, so that no air could reach the fan except through the bolting cloth and a valve to regulate the force of the air. This machine was run at different times by Mr. La Croix, for several weeks, who was experimenting for the right motion and degree of coarseness of the cloth, etc. It will be seen by the following translation of page 835, vol. 2, of a French work by Benoit, published nine years ago in Paris, that so far this machine was a copy of the machine used in France, and is not an American invention, and cannot be patented in this country:

"Mons. Perrigault conceived the idea of combining a draft of air with the mechanical shaker, for separating from the middlings the flaws or bran specks which redden them.

"The machine was first introduced in the Scipion Mill, and diminished in a remarkable degree the redness of the poorer middlings.

"A flat sieve with a slight pitch, oscillated by a cam 150 times a minute, is tightly enclosed in a case, while a thin stream of middlings travels over the bolting cloth, a fan above making 600 revolutions per minute, causes a current of air to ascend, which passes through the bolt cloth, carrying away the waste and small particles of bran much less heavy than the middlings, which pass through the bolt cloth. The air charged with these light particles travels toward the fan through zigzag compartments formed in an elongated rectangular chest, above the cloth, by horizontal shelves. One can see that the force of the air, which the miller can regulate at will by registers, is checked by zigzag shelves, causing the particles of bran to settle down upon them, and which can be removed at will. The air leaves the fan as pure as it was before entering the machine."

During the time Mr. La Croix was testing the machine, George T. Smith, one of the many individuals who are claiming to have patents on this machine, was a stonedresser in my employment, having no other duties in the mill; but I shortly afterward gave him charge of the mill, and while in exercise of his duties he instructed the millwright to put traveling brushes upon it, to save the labor of brushing it by hand, which we had found necessary to do to keep the cloth clear, I having set the machine running regularly.

About the 1st of May, 1871, I ordered another machine built, in all particulars like the first, with the exception of making it double, with finer cloth upon one half, and using less draft, dividing the middlings by a reel, throwing the coarse in one half and the fine in the other, which was my own device.

Again in June, 1871, I ordered a third machine constructed, and at Smith's suggestion divided it in three transverse sections, which were designed to give greater suction on the tail than the head, each section having its own valve to regulate the force of wind. With the exception of the transverse sections, the traveling brush and some minor trifling details, this machine is identical with the machine as used in France, described in translation before given. This machine is now running in our mill (and what is now called Smith's Improved Middlings Purifier) but did not give entire satisfaction, more on account of its incomplete construction, perhaps, and proper proportions than its defects, the section being neither a benefit nor injury; experience having taught us that the different degrees of coarseness of cloth which it is necessary to use, act as regulators of the draft, letting at the head (where we use finest cloth and need less draft) less air through, while at the tail a strong draft is permitted through the coarser cloth.

Until April, 1872, I thought Smith's brush essential to the satisfactory working of the machine. At that time, Mr. Janney, our present head miller, tried the experiment of gently tapping the frames supporting the cloth, by machinery, which we found to be fully equal to the brush in keeping the cloth clean, while the expense and complications were lessened, and much irregularity in the working of the machine saved, the machine doing better work. We have now one of those machines with Janney's improvement substituted for brushes, running in our mill and cleaning our finest middlings, and have no hesitation in recommending it as unsurpassed by the Smith, La Croix or Barter machine. I would also recommend it as the best machine to buy, to avoid the complication of patents, the right to use the brush being claimed by Barter, of Faribault, to whom a patent has been granted for a brush, by La Croix, to whom a patent has been issued, and by Smith, while Janney's right to this method of clearing the cloth is unchallenged, so far as I have heard.

I would state for the satisfaction of all apprehensions, your machine is

from any angle . . . your self-rising flour

BELONGS UP-FRONT!

From a merchandising angle—self-rising flour is a natural up-front item! Modern store designers and progressive merchandising men agree that flour belongs up-front. Flour is an ideal product from a special promotion standpoint! Flour lends itself well to attractive displays and point-of-purchase merchandising techniques!

From a volume-selling angle—With home baking on the increase, self-rising flour is surely going up-front in sales, too! What's more, as more housewives discover how simple, easy, fast, and economical home baking is with your brand of self-rising flour (made with slow-acting V-90 phosphate), demand is certain to increase and repeat sales climb rapidly!

From a profit angle—self-rising flour really belongs up-front! Yes, you profit through increased sales! Your jobber and retail dealers profit through the increased sale of over 50 related home baking items as well as the flour! The housewife profits from uniform baking results every time . . . profits through time and money saved . . . profits by giving her family better tasting, more nutritious and more digestible foods!

V-90*

*Coated Anhydrous Monocalcium Phosphate

It's a fact . . . in 1950 your self-rising flour

BELONGS UP-FRONT!

VICTOR CHEMICAL WORKS

141 West Jackson Blvd. • Chicago 4, Illinois

a copy of the original French machine with the exception of Janney's improvement for cleaning the cloth, and is therefore an infringement on no other patent.

Yours truly,
George H. Christian.

We manufacture three sizes, viz: No. 1, capacity 4 tons middlings per 24 hours; No. 2, capacity 8 tons middlings per 24 hours; No. 3, capacity 12 tons middlings per 24 hours. Size of No. 1, outside dimensions, 6 feet wide, 7 feet long, 9½ feet high; price $350. Size of No. 2, outside dimensions, 11½x7x9½ feet; price, $550. Size of No. 3, outside dimensions, 17½x7x9½ feet; price $750. Printed instructions on how to set up and operate these machines will be sent with each.

Charles M. Hardenbergh & Co.
Minneapolis, Minn.

Some of the Methods Used by Smith to Get Testimony

G. L. Porter of Faribault, Minn., said that Smith came to Faribault to look up the men who had worked on the Barter machine, and see if he could get them to testify in his interests. Smith told him that he would be willing to pay some man to go around and see these men; and he offered Porter $100 to do it, and obtain their testimony for him; or words to that effect. Porter told him that he (Smith) could attend to that business, and find out what the men knew in regard to it just as well, if not better, than anyone else; and that he could get all Porter knew about the matter without a cent as well as he could for $100, or any other amount.

He then asked Porter as to the honesty and integrity of several men whose names Porter had given him. If they were as honest as Mr. Porter, he would not care to see them; but nothing daunted with the cold reception that Mr. Porter gave him, he looked up Simeon P. Case.

Q. Did Mr. Smith at that time directly or indirectly propose to you to pay you money to swear for him?

A. I understood that he offered directly to pay me for swearing for him. I said to him, you and all the rest have not enough money to buy me.

This man seemed to be entirely too honest to suit Smith's purposes.

I might go on quoting much similar testimony, but this is enough for this time.

CLEAN OUT INSECT HARBORS in Milling Machinery

Dowfume EB-15

FOR MACHINERY AND SPOT FUMIGATION

Fumigating a bran duster with Dowfume EB-15.
Note: Operator has gas mask readily available.

One so-called "dead" spot may be alive with insects breeding in even small accumulations of stock. Re-infestation of your whole milling system may start here!

Fumigation with Dowfume EB-15 is the answer to this problem which has long plagued the mill operator. It offers an efficient means of eliminating insects in their breeding places, such as in "dead" stock in milling machinery and flour handling equipment capable of retaining fumigant vapors for reasonable lengths of time.

Here's why: When properly applied, Dowfume EB-15 can remain effective from 30 to 60 days. Its long-lasting residual effect lies in the slow evaporation of this low volatility fumigant.

Here's how: Dowfume EB-15 is poured into the hand-hole at the top of the duster, or through any other convenient opening. Where possible, the liquid should be applied directly on "dead" stock.

Your local fumigator is familiar with Dowfume EB-15. We will furnish his name on request. Ask him for the facts.

Dow Methyl Bromide

For general space, vault, box car and tarpaulin fumigations. Works speedily but thoroughly—controls rodents and insects in all stages of development—aerates rapidly.

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DOW
CHEMICALS
INDISPENSABLE TO INDUSTRY AND AGRICULTURE

Fatigue Responsible for Many Accidents

ONE of the most important items in any firm's balance sheet is the annual cost of fatigue, according to Dr. B. L. Corbett, secretary of the Milwaukee Safety Commission. He said that management realizes that fatigue often is the common denominator of many industrial problems.

There are two kinds of fatigue. One is recognized as physical—that "tired feeling." The other less understood, is nerve fatigue.

In the first, waste substances are developed by the physical activity of the muscles, and pain or fatigue results.

In the second form of fatigue, waste substances develop in the brain or in the reflex centers maintaining muscular activity. These waste substances are dispersed through the blood stream, reducing personal efficiency. In that way, it was explained so-called laziness, lack of interest, and poor will power result. Both types of fatigue can cause accidents in spite of safety precautions taken by the employer, safety men said.

Fatigue causes a lack of coordination between the brain and the muscular system, accounting for many of the seemingly impossible ways in which men are hurt. It reacts on the brain like a drug, causing the worker to move in a virtual fog.

In a recent study of fatigue among interstate truck drivers, the U.S. Public Health Service found that it resulted in lower psychomotor reaction. The end result was proneness to accidents.

Every time study engineer sets aside from 10% to 35% of the working day for losses in production and efficiency due to fatigue. When the day's work is compared with wages, management often learns that about 65¢ is given in work for $1 in pay, yet the worker is not to blame. Some studies indicate that the average worker loses one-third of his work day because of fatigue.

Records kept for a number of industries have indicated that 94% of all absenteeism is due to causes outside the industrial occupation, often directly traceable to fatigue. When a worker goes home tired each day and is unable to recoup by proper rest and relaxation, he may soon decide to take "some time off."

Medical men agree, it was pointed out, that if excessive fatigue accumulates, a pathological condition may result. This may in turn lead to nervous prostration or some psychologically-connected ailment. The individual's susceptibility to respiratory diseases increases. Very often the worker carries his fatigue with him into his home life, making life almost unbearable for his family.

Canadians Study Accuracy of 10 Moisture Meters

WINNIPEG—The report of a comparative study of 10 electrical meters for determining moisture content of wheat was published in a recent issue of the Canadian Journal of Research.

The report was prepared by I. Hlynka, V. Martens and J. A. Anderson, all members of the staff of the Grain Research Laboratory, Board of Grain Commissioners for Canada.

The meters tested included two made in Canada, and four each from U.S. and British manufacturers. The material used was 150 samples of Western Canadian hard red spring wheat, each taken from an individual carlot. The samples were selected so as to obtain a relatively uniform distribution of moisture contents between 11.5 and 17.5% and bushel weights between 55 and 65 lb.

All meter tests were made by one person with an assistant to help with the subdividing and weighing of the samples. These men made a preliminary study with 50 samples in order to familiarize themselves with the operation of the meters. Temperature and humidity in the laboratory were held uniform and a two-stage vacuum oven method of moisture testing was used as a primary standard for comparisons.

The results of the tests were analyzed statistically and presented in the form of graphs, with standard errors of estimate.

In discussing the results of the tests, the authors state:

"The data reported in this paper relate to single samples of each manufacturer's meter. A question thus arises as to whether a generalized statement can be made about the comparative merits of the meters. For the Tag-Heppenstall and Universal meters, several of which have been tested in this laboratory, some additional information is available. Experience has shown that Tag-Heppenstall meters that are in good working order can be readily adjusted by empirical tests to give results in accordance with a specified calibration. Several Universal meters have also been shown to give uniform results, and there is reason to believe that these meters will retain their calibration during a reasonable working life.

"There is also the question of whether repetition of this study would place the meters in the same rank order of accuracy. The statistical significance of differences between standard errors of estimate cannot be computed from the data for a single study. But experience suggests that it is of the order of 0.3 percentage point or less. On this basis, the Tag-Heppenstall meter yields the most accurate estimates of moisture content and is followed by the Universal meter. The remaining meters fall into four groups listed in order of accuracy as follows: Tag-Dielectric and G.R.L.; Patterson and Steinlite; Mullard and N.P.L.; and Marconi and Toplis-Simpson.

"Even the best of these meters will give an erroneous estimate of the moisture content of a considerable proportion of any series of samples. This is to be expected. The meters measure the electrical properties of the grain, which are functions of several other properties and conditions of the samples of which moisture content is only one, though the most important. Among these other factors, the distribution of the moisture is known to affect electrical properties. Accordingly a calibration established for the average distribution of moisture in normal samples is not accurate for samples in which the distribution is abnormal because the grain is freshly harvested, recently tempered, or recently subjected to rapid drying. The packing of the sample in the test cell has a major effect on electrical properties, and most meters therefore have loading hoppers designed to reduce this source of variation. For these and other reasons, not yet fully investigated, an accurate prediction of moisture content by electrical methods is not likely to be achieved by any meter for all samples in any random series."

—HERE IN THE STAFF OF LIFE—

MOVES TO OKLAHOMA CITY

CHICAGO — Fred A. Markwardt, representative of Alexander Bros., leather belting manufacturer, is being transferred from Chicago to Oklahoma City where his address will be 1534 N. W. 31st St. The Oklahoma City location will give him a more central location for serving the flour milling industry.

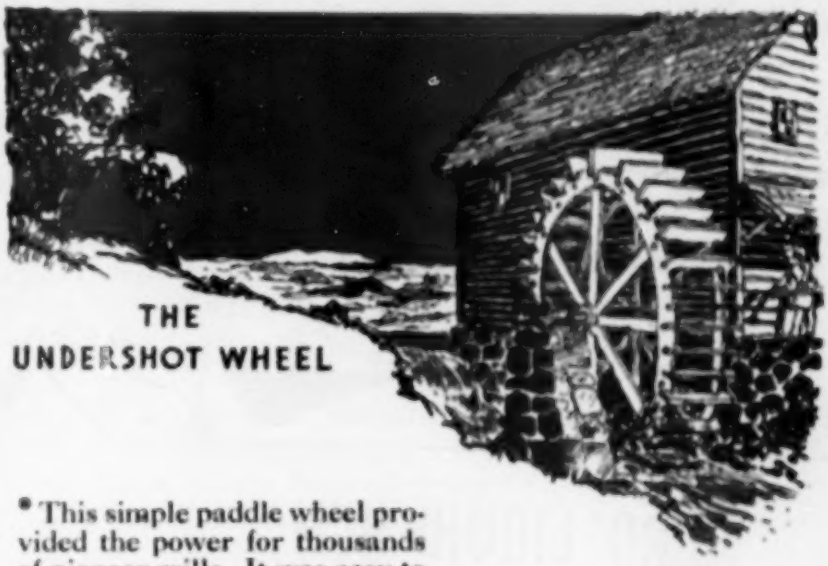
—HERE IN THE STAFF OF LIFE—

ADVERTISING MANAGER

HARRISON, N.J. — Robert P. March has been named advertising manager for the Worthington Pump and Machinery Corp., Thomas J. Kehoe, assistant vice president and general sales manager, said in his announcement of the appointment that Mr. March began his duties March 1.

The Southwestern Laboratories
KANSAS CITY, MO.
GRAIN - FLOUR - FEED

A SHORT OUTLINE OF THE HISTORY OF THE GREAT MILLING INDUSTRY



• This simple paddle wheel provided the power for thousands of pioneer mills. It was easy to make, required no mill pond and would turn in a fairly shallow stream. It gave good service at low expense and upkeep.

SWISS SILK is the bolting cloth that gives good service economically at full capacity under all atmospheric conditions.

It has spanned five generations of American milling and kept on top all the way. You can't buy better bolting cloth.

BODMER
DUFOUR
EXCELSIOR

SWISS SILK

SCHINDLER
WYDLER

German Millers Claim Lead in Technological Progress

By George E. Swarbreck

REPRESENTATIVE German millers claim that, by taking advantage of progress in milling science during the past two years, the home milling industry will be well in advance of all foreign competitors when the current rebuilding program has been completed. The destruction sustained during the war years is enabling them to rebuild their mills in accordance with the tenets of modern milling engineering practice and to use nothing but up to the minute equipment. This will result in increased efficiency and a capacity greater than that of the prewar years.

Independent observers have noted with surprise that the German millers are rebuilding with the help of American finance furnished under the aid program. Critics point out that this can be classified as either suicide on the part of the American millers or as culpable homicide by those allied officials responsible for allowing the situation to develop on these lines.

Machinery Manufacturers Busy

Besides the output of their own milling engineering works, of which one of the chief is the M.I.A.G. organization at Brunswick, other firms are working at full pressure to meet the demand for machinery. Additionally foreign equipment is allowed to be imported into the country, Buhlers of Switzerland being prominently engaged in this business. American funds are again, directly or indirectly, used to finance the purchases.

The largest milling plants are situated in Hamburg, Hameln, Bremen, Berlin, Mannheim, Cologne, Essen, Dusseldorf, and Frankfurt and it was in these areas that the greatest destruction was wrought by the Allied forces during the war. It is here, too, that the greatest rebuilding activity is in progress.

The total number of large and medium-sized mills in Germany was in the region of 150 and they were responsible for producing about 70% of the flour. The remaining 30% came from many thousands of small mills, in various parts of the country but mainly in what is now the Russian Zone.

EDITOR'S NOTE — Mr. Swarbreck recently spent some time in Continental Europe, including the U.S. and English zones of Germany, to obtain an on-the-spot account of the condition of the milling industry in postwar Europe. The accompanying report contains much significant information for millers and machinery manufacturers in the U.S.

In southern Germany, and especially in Bavaria, the damage during the war was negligible but here also the mills have been modernized by the owners with money made by the illegal sale of white flour during times of strict rationing, it is alleged in responsible quarters.

Several New Developments

The German milling engineers, taking advantage of the large field open to them, have introduced many developments in the sphere of milling, the chief improvements being in connection with pneumatic transport and it is claimed that the mechanical deficiencies formerly met have now been overcome. It is stated that control of the load carried and the air velocity is now more effective while air ducts and valves have a greater degree of reliability. The field of research in respect of flour quality is not being neglected and work in this direction is carried on by Prof. Paul Pelshenke at the Cereal Institute at Detmold.

There are a number of combines owning mills in various parts of Germany and among these the organizations of Kampffmeyer and Plange are outstanding though they were by no means the biggest in prewar days. Both firms are progressive and pay great attention to new developments in milling practice. The Kampffmeyer organization had mills at, among other places, Hamburg, Hameln and Berlin and all suffered damage.

A new mill recently completed at

Here's the ideal product for effective pest control...

AERO* LIQUID HCN

FUMIGANT

Kills insects and rodents on a plant-wide scale

Insects and insect eggs, as well as rodents, are quickly killed by the penetrating gas of Liquid HCN. Periodic fumigations are the clean, easy way to effective insect control in mills.

Liquid HCN leaves no taste or odor and does not affect the baking qualities of flour.

Have an Industrial Fumigation Engineer apply Liquid HCN; if you do not know of such an expert, write us for the name of one serving in your locality.

For effective insect control in grain in elevators use CYANOGAS G-Fumigant. To control rodents outdoors use CYANOGAS A-Dust.*

*Trade Mark

AMERICAN Cyanamid COMPANY

Agricultural Chemicals Division

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We make ALL kinds. Specialize in "Ready Dressed" cogs which are READY TO RUN the moment driven and keyed. Write for circular "DW" and instruction sheets free.

The N. P. Bowsher Co., South Bend, Ind.

NEW HOME OF
RESEARCH LABORATORIES
SERVING
Sterwin Chemicals INC.

Sterling-Winthrop Research Institute

RENSSELAER, N. Y.

Located next to the giant Winthrop-Stearns plant at Rensselaer, N. Y., is the beautiful new home of the Sterling-Winthrop Research Institute. This impressive structure is among the largest and most modern laboratories of its kind in the country.

STERWIN PRODUCTS RESEARCH

A large staff of scientists, using the latest scientific equipment and methods, is continually striving, as a part of the Institute's broad research program, to improve existing Sterwin products and to develop new products and methods to aid the food industry in the production of better, more nutritious foods.

Among the many developments of the research facilities behind Sterwin Chemicals are these outstanding products for the Milling Industry:

VEXTRAM — the *original* low ash, free flowing, stable mixture containing vitamins and food iron for easy, accurate and economical enrichment of flour and other cereal products.

OXYLITE — a highly efficient and economical flour bleaching agent that has been endorsed by millers in every important flour producing state.

ROCCAL — the *original* quaternary ammonium germicide for better food plant sanitation.

STERWIN'S FREE FLOWING BROMATE MIX IS NOW AVAILABLE TO MILLERS.

Apply Sterwin research to your production problems. Consult your Sterwin Technically Trained Representative, or write direct to Sterwin Chemicals Inc., 170 Varick St, New York 13, N. Y.

Sterwin Chemicals INC.
Subsidiary of Sterling Drug Inc.
170 VARICK STREET, NEW YORK 13, N. Y.

Distributor of the products formerly sold by Special Markets-Industrial Division of Winthrop-Stearns Inc., and Vanillin Division of General Drug Co.

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Hameln incorporates several new features and the German millers are naturally proud of their achievements. This mill is constructed of steel and concrete and consists of nine floors. The first three floors are devoted to storage purposes with the exception of part of the third floor which is used for housing the transmission equipment. The pneumatic system allows a considerable saving of space with the result that there is still ample room for storage even on this floor. The roller mills are on the fourth floor and special attention has been paid to providing the maximum of light and air. The duct and piping systems are on the fifth floor and the pipes are of round section galvanized sheet iron and of the new jointed form so that any desired angle up to 45° may be obtained by the simple operation of turning the pipe.

Higher up are the purifiers, plansifters and other machines. Below the separators are large glass cylinders to facilitate control. Among the outstanding improvements is a new type of purifier for semolina and middlings which is completely enclosed with the exception of the drive pulley. An improved semolina collector is also a feature. It is possible to observe the working through a large window while other windows, smaller in size, are provided in order to light up the interior. The overtails do not pass over the whole width of the sifters but are gathered together at the side and cascaded. There is thus a continuous flow which, it is claimed, ensures better separation. Another improved design is a centrifugal bran separator which is metal enclosed.

Rebuilding work is also in full spate at the Plange mill at Dusseldorf though progress was not sufficient to give any indication of the future capabilities of the mill. Before the war the daily capacity of this mill was 6,400 bbl. but it was almost totally wrecked by Allied artillery fire shortly before the crossing of the Rhine. The Plange organization, with its other mills at Soest and Hamburg, had a total milling capacity of 13,700 bbl. a day and ranked third in size among the milling combines operating in prewar days.

This group, before the war, had the reputation of being the most scientifically minded of all organizations in Germany, Dr. Rudolf Plange being

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one of the first to be credited with the desire to apply scientific principles to the craft of milling. His influence is still apparent in the firm's organization, the laboratories today being among the best in Germany. Planges also pays great attention to the welfare of workers, an up-to-date canteen being installed even before the rebuilding of the mill was put into operation.

Kurt Zschirnt, who is supervising the rebuilding operations, and Oscar Ridder, the chief engineer, both technicians with the highest qualifications, are controlling the work of bringing back the Plange mill to its former position of eminence in the German trade and this, combined with the progressive outlook of the present management, will make the organization a powerful factor in the German trade of the future. While the officials expressed regret that their mill was damaged in the last few weeks of the war they take comfort from the fact that the situation is resulting in the acquiring of an up-to-date mill with some of the most modern machinery it is possible to obtain.

Parts of the mill are now in operation again though it is functioning under difficulties. The machines are old and were taken from other German mills where the damage was too extensive to permit immediate starting up. After repair the machinery is working reasonably well and a good quality flour is being produced.

The shortage of sacks is a major difficulty in the German mills but to supplement existing stocks paper bags are being used with some success. The system is more economical in the long run though on occasion complaints of loss have been received due to the bursting of bags while in transit.

Sufficient Capacity at Present

The current German milling capacity is sufficient to meet present requirements at the prevailing rate of extraction and there is little doubt that when the present work of expansion is completed some efforts will have to be made to find export markets in competition with the U.S. and Canada and, at a later stage, with Britain and possibly France. Germany's current economic position forbids the purchase of wheat for other than her own immediate requirements but as the situation improves, as undoubtedly it will because of the help given by allied officials and American funds, Germany will become a buyer of wheat in the world markets. Then the competition will be felt severely by other flour exporters.

The German millers, not unnaturally anxious to protect their own trade, are pressing for the imposition of a duty on imported flour similar to that which was in force from 1927 onwards and which succeeded in driving imported flour from the market by the end of 1933. The milling industry is alleged to be monopolistic in form and there is reason to believe that the leaders of the trade have a profound influence in government circles. Discussions on the question of a new tariff law have recently been undertaken and observers stated that the millers were asking for the extraordinarily high figure of 15% as the duty on flour. Though individual millers stated that the industry had no hope of being granted such a high figure there is enough evidence to show that when the law is finalized it will be high enough to make the import of flour prohibitive.

Another development which is exciting allied official interest in Germany concerns the attempts to impose a quota system on the mills by the millers themselves in order to divide markets, maintain prices and rationalize output. Such a scheme would be directly contrary to allied efforts to break all cartels and similar organizations in Germany and there is a strong body of opinion which considers that the importation of foreign flour should be allowed, even under pressure from the allied authorities, in order to provide some competition for the home milling industry. In such an event prices would be kept down and quality would have, perforce, to be kept up.

It would also prevent the too speedy growth of the German industry to a point where it will become a dangerous competitor for other flour exporting countries. To forbid Germany to enter export markets and to compete fairly is not the desire of any outside interests, is a point frequently stressed by experienced observers. On the other hand, to make it difficult for Germany to compete unfairly, with the aid of government subsidies, is necessary in the interests of world peace and security. Before the war, the assistance granted by the government in the form of subsidies enabled the Germans to dump flour at uneconomic rates in several countries. A cartelized industry might be tempted to adopt the same methods and safeguards must be imposed to prevent the grow of such a monopoly.

Working independently the German milling firms can become progressive members of the world flour trade. Individual firms, like those of Kampffmeyer and Plange, are making praiseworthy efforts to rehabilitate themselves and their efficiency is laudable. The danger lies in allowing the German industry to associate together too closely for the purpose of inflicting a cartel and all the evils entailed thereby on its own consumers and on the world in general.

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Needed Improvements in Milling

By John Speight

FOR the purposes of this article let us survey the world in general and ask ourselves what improvement, if any has been effected in flour milling during the past 10 years. The answer is, practically none worth mentioning, excluding of course such things as improvements in the shape or size of machines, door handles, color of the paintwork, etc., which, although pleasing in themselves, are of little importance considered against the background of development which should and surely must come to this important world wide industry.

Ever since Buchholz, the German engineer, introduced into Great Britain the system of grinding wheat by means of two rollers running together, and dressing the resultant product by mechanical means has this principle remained static throughout. Buchholz, to his everlasting credit, was the lone pioneer who received little credit but had faith in the ultimate success of the roller system and struggled against overwhelming odds in order to perfect his ideas. It is acknowledged that he succeeded through the ultimate success of others who followed and took up his ideas and finally developed the system of flour manufacture as we know it today. Industry, therefore, owes a great deal to this man who first introduced the roller system as a commercial proposition.

A tremendous amount of development work has been carried out since the days of Buchholz but the principle remains the same. Our knowledge of the fundamental principles has been greatly enlarged, on the physical side we have made tremendous strides, every year sees some new secret wrested from nature, but little or no progress has been made on the mechanical side and it is very surprising that as yet no new principle has been introduced into this vast world wide industry of flour milling.

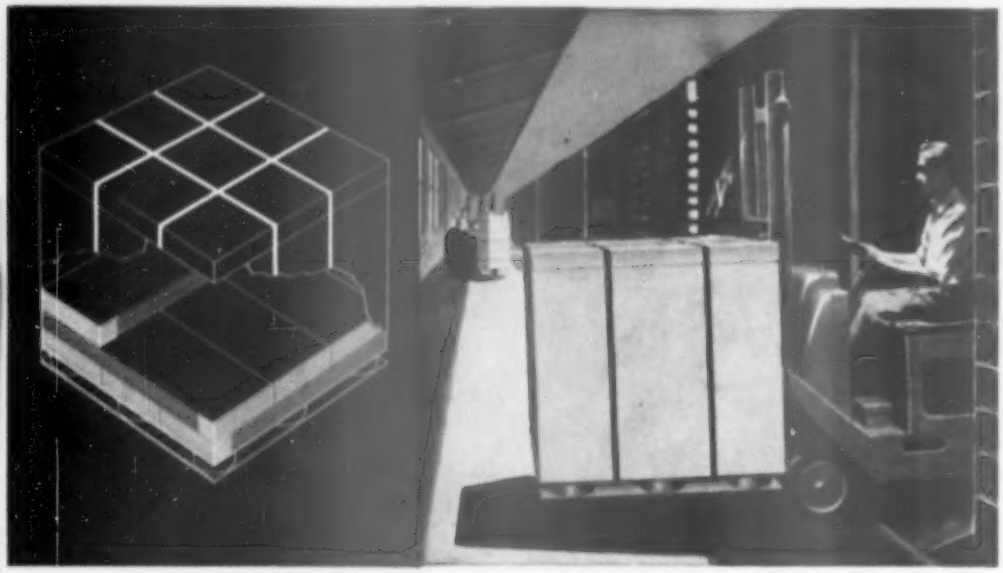
The advent of a new principle happens only once a decade or even less, which brings us to an interesting point as to how many principles there are employed in the actual manufacturing processes. Have you ever thought how many principles are employed in tearing this small grain apart. They are few in number and I feel sure can be counted on the fingers of both hands. Suppose we try and enumerate the different principles concerned employed in flour manufacture.

First of all, in order of importance, I think is grinding, crushing and shearing by rollers or millstones, followed by No. 2, separation by size or weight by such machines as purifiers, plansifters, centrifugals, warehouse and milling separators, cockle and barley cylinders or discs, etc., cyclones, dry stoners, washers, etc. No. 3, adding or removing moisture to or from grain by means of the application of air current and heat, combined or separate, by such machines as washers, whizzers, conditioners. No. 4, adding or removing moisture to or from grain by a vacuum process. No. 5, transport of mill stocks by worm conveyors, elevators and belt conveyors. No. 6, transport of grain and mill stocks, etc., by pneumatic methods, unloading grain from ship to silo, conveying mill stocks, semolina, flour, bran, etc. No. 7, cleaning silk and wire covers by brushing or scraping.

Editor's Note: The accompanying article was prepared by Mr. Speight for publication in this journal. He is a prominent British milling engineer, having been on the staffs of Henry Simon, Ltd., and the Turner firm of Ipswich, both leading manufacturers of milling equipment. More recently he has been in the British zone of Germany as an observer for the British government.

Roller Mill an Adaptation

Let us first consider group 1, grinding, crushing and shearing by rollers or millstones, for this is the oldest principle of them all. From time immemorial man has bruised, crushed or ground corn by rubbing or pounding between stones and the like. The roller mill is simply a modern adaptation of the millstone or earlier methods of reducing corn by rubbing or bruising. The principle, however, has remained the same throughout, and one would be tempted to think this principle incapable of being supplanted, and had one suggested a few years ago that the roller process was doomed to oblivion he would have been laughed at for his pains but the kiss of a fairy prince apparently has been bestowed on some enterprising scientists who are at present employed in perfecting a system of reducing grain by means of compressed air which has shown surprising results. In another field scientists have had a certain amount of success in reducing grain by a process of electrical bombardment. They have al-



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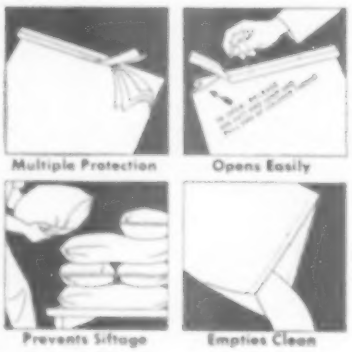

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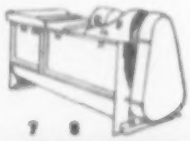

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ready succeeded in reducing minerals by these means and they see no reason why they should not succeed with grain. In this group, therefore, one can discern signs of something stirring which is going to have a profound influence in the shape of things to come.

In group 2, separating by size or weight, this is a fundamental principle and one not likely to be discarded, for whatever machines or processes are employed, this principle will remain. No doubt we shall see much improvement in design and application in the years to come. We sadly need an inspired genius to come along to point the way in this respect, that is if he can get past the venerable heads now sitting in the chair.

Tempering Research Needed

Group 3, adding or removing moisture to or from grain by the application of air current and heat; in this direction efforts are continually being made to increase the efficiency of this process, but a great deal remains to be done. No doubt, when we are more enlightened as to why and how we carry out this principle will it be possible to obtain more beneficial results from the expenditure of much cash and materials we are forced to employ at present in bringing grain into a suitable condition for grinding.

Group 4, adding or removing moisture to or from grain by means of a vacuum process is a more expensive and, in my opinion, much less reliable method than doing the same thing by the application of air currents and heat, the results certainly do not justify the extra expenditure involved and in consequence I see no future for this process applied to flour manufacture.

Group 5, transport of stocks by mechanical means, will certainly not have the kiss of a fairy prince to stir it up for as far as flour milling is concerned, it is likely to have a lusty kick in the pants from the fairy prince, for the transport of mill stocks by mechanical means is one of the horrors of the Nineteenth Century still remaining with us. We are all extremely grateful and deeply indebted to Oliver Evans, the American engineer, for giving us this form of transport which has held good since about 1790 but from a hygienic point of view its demise is more than overdue.

Pneumatic Conveying Not New

Group 6, transport of mill stocks by pneumatic methods; this is, of course, nothing new, the principle has been employed for moving grain for over half a century. In 1880 Frederic Eliot Duckham, engineer to the then Millwall Dock Co., London, used compressed air to force dredged mud through pipes on to some marshland and later experimented with the same idea to move grain. Eventually he designed a pneumatic plant which was erected on a barge which transferred grain from ship to barges at the rate of 90 tons an hour. By 1895 progress was such that a plant was built capable of lifting 180 tons an hour. Naturally these early plants were not very successful, chiefly on account of lack of knowledge of the underlying principles involved and it was not until Duckham, collaborating with the German engineering firm of Luther & Co., one of the group of firms forming part of the MIAG organization, that pneumatic handling and conveying merged from the development stage and became the success it now is, and in doing so gave to the industry the blessing of pneumatic transport and as such the world should be ever grateful to him for his courage and foresight.

Pneumatic conveying applied to millstocks is, of course, a fairly new departure and once the teething troubles are over, it will become the accepted form of transport for all mill stocks. From a hygienic point of view it is the only form of conveying that should be allowed in flour manufacture. The application of pneumatic transport to mill stocks is as yet in its infancy and it will require many good resounding smacks from the fairy prince when he deigns to stoop and kiss it to urge it forward, for make no mistake, in a few years' time it will bear no semblance to its present form. There is a great future for this form of transport if properly applied.

Better Cleaning of Sieves

Group 7, cleaning of covers by brushing; this principle has held good for many years, it is a clumsy, inefficient means of trying to keep covers clean, at its best it is only 20% efficient. The capacity of most machines could be greatly increased if we could apply more efficient cleaning methods. It is certainly time something should be done in this respect, perhaps the fairy prince is stealthily coming along on tip toes, for once upon a time the humble housewife had to laboriously brush her carpets and the like and this was a typical example of energy wasted with little result, but today she plugs in her electric vacuum sweeper and with little effort the job is done. A new principle was evolved, cleaning by suction instead of by sweeping.

Owing to the imposed necessity for curtailing new developments during the weary war years and the period immediately following, little or no new development work was possible, but the kiss of the fairy prince seems to have been bestowed on the milling industry and this appears to have awakened interest in a desire for some radical change in our methods. Believe it or not, flour milling is actually stirring in its sleep! As yet it is only a gentle sigh and a lazy stretch, the usual portend of one awakening from a profound sleep but in the light of knowledge gained, serious efforts are now being made to introduce new principles which, if successful, will be startling in the extreme.

Attitudes Toward Research

In the milling engineering industry I am inclined to the opinion that de-

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velopment work is looked upon askance. Not being part and parcel of the routine, it is regarded more or less as a luxury, somebody's pet to be pushed into any old corner. It is not earning profits in the immediate sense, in short it is regarded as a nuisance.

Many years ago the milling industry of Great Britain recognized research and development by creating a body called the British Millers Research Assn., which has eventually become a government-aided and sponsored body. This organization is certainly alive to the problems confronting the industry, but from a perusal of their reports one is inclined to think their major interests are on a scientific and biological plane rather than mechanical. One wonders why. Perhaps the thought of millers and engineers sitting around a table in order to discuss new ideas for the research association to develop them for general use in the industry would be, I presume, regarded more or less as facetious. Individual engineering firms naturally want to develop new ideas for their own use and advancement. It would be folly were it otherwise. Strange to relate I have yet to meet a milling engineer possessed of an original idea and who developed same for use in the industry. They prefer to purchase ideas that have already been tried and proved.

Others Into Engineering

For many years past milling engineering has been in the hands of comparatively few individual firms, that is firms of any substance or size, their names are well known throughout the world, but one can discern a change coming over this sort of family affair business. Many other firms who formerly manufactured such things as aeroplanes, electrical equipment, vacuum cleaners, refrigerators, etc., are casting covetous eyes on this lucrative and tempting business, and serious efforts are now being made by these same firms to introduce new ideas and innovations in order to establish themselves in the milling industry.

The next few years are going to be a period extremely important to the development of flour milling; just as a pioneer party of British millers visited Vienna in 1877 to study the new roller system, history may well repeat itself and another party of British millers may make a pilgrimage to some other land where apparently new ideas have fallen on good ground.

In describing the visit of the British millers to Vienna, the "Vorstadt Zeitung" paid them the following tribute: "The party of English millers seemed pleased with our city, they do not hide their nationality, their clothes and beards are worn in truly English fashion, their tall white hats covered with long white veils in order to prevent sunstroke. Very practical people these English." Banquets were given in their honor and they came away much impressed. Life must have been very wonderful in those far off days. If the miller of today makes a pilgrimage he will most probably charter a plane to take him there and back in a matter of hours, and after a quick look round and a snatched lunch he will spend the week-end in bed recovering from a bad attack of nerves and indigestion; not the fault of the man but the age we live in.

Man possesses a gift found only in a rudimentary form in animals, a brain; a wonderful piece of machinery that nothing can replace. It impels him to engage in study until it becomes an all absorbing search, and the reward it bestows is power. To be content with what we know is for the most part to shut our eyes against conviction, since from the very gradual character of our education we must continually forget and emancipate ourselves from knowledge previously gained. Today it is more important than ever before, for us to set aside old notions and embrace fresh ones. As we learn, we must unlearn something which has cost us no small labor and anxiety to acquire. Most people find it so difficult to break away from tradition and get away from prevailing practice. They will persist in the same outlook and same application of principles and perspective, their minds run in similar grooves. Football pools are the best illustration of this mass effort, for out of the teeming millions who enter these competitions every week, possibly only one person in this mass thinks differently and in consequence wins a prize.

What of the future? Is the roller system doomed to oblivion? I personally think it is only a matter of a few years before this system will be replaced by a process so unlike our present day manufacturing methods that it can be likened to a comparison between the horse drawn buggy and the modern aeroplane.

Think of the possibility of using compressed air for reducing grain to flour in conjunction with pneumatic transport of mill stocks! What a field for development, full of possibilities! Here then is a field for those possessed of a little imagination, unhampered by hidebound present day conventionalities and practices.

The door is opened wide for the engineer and miller alike. Let us hope they will not hesitate, fumble and stumble on the steps or in the doorway but pass through into the new milling world which awaits them.

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Staphylococcus Food Poisoning

By Dr. G. M. Dack
University of Chicago

ALTHOUGH food poisoning has afflicted man for centuries, the cause of perhaps the most common type has been unknown until within the last two decades. In 1879 Henry Leffmann, lecturer in toxicology in the summer school of Jefferson Medical College, called attention to the frequency with which cream puffs had been implicated in outbreaks of food poisoning.

He wrote, "I have made chemical examinations of portions of cream puffs, which have caused trouble but have not found anything which could be assigned as the cause of the action."

Although outbreaks of food poisoning have been common, and many of the implicated foods have been tested and fed to experimental animals, most workers have had the same experience as Henry Leffmann.

In the early days chemists turned their efforts to a study of putrefaction when attempting to determine the causes of food poisoning outbreaks. In this connection, some of the chemical products extracted from putrefied matter received the name of "ptomaines"; the term "ptomaine" being coined in 1870 by the Italian toxicologist, Selmi. The word was taken from the Greek "ptoma" meaning "corpse." Today, there is no single chemical entity recognized as a "ptomaine," and from the chemist's standpoint this term is meaningless. It is now well known that some of these products extracted from putrefied matter cause food-poisoning symptoms in experimental animals only when introduced into the tissues as such but are without effect when given by mouth.

EDITOR'S NOTE: The accompanying article by Dr. G. M. Dack, University of Chicago, comprises the essential text of an address delivered by Dr. Dack before the wholesale pie branch session of the 1949 American Bakers Assn. convention in Atlantic City. In it he reports on the work devoted to the chemical study of staphylococcus food poisoning and the basic research leading toward the development of inhibitors.

Man has for many years incorporated certain putrefied foods in his diet; limburger cheese is a common example. It was observed as far back as 1884 that although outbreaks of food poisoning sometimes occurred from cheddar cheeses, none occurred from limburger cheese, which certainly contained the so-called "ptomaines."

Staphylococcus the Cause

It is now known that the bacterium called staphylococcus is the cause of perhaps the greatest number of food-poisoning outbreaks in this country. These outbreaks are often erroneously called "ptomaine" poisoning. The staphylococcus, which was seen as early as 1880 by Pasteur in pus, appears as a small, round organism growing in clusters somewhat like a bunch of grapes when appropriately stained and viewed under the microscope. These bacteria are extremely common in our environment and may be found in the throat, on the skin and in the air. In fact, everyone of you is carrying strains of staphylococci. They are the cause of pimples and boils, and some outbreaks have been traced to food handlers having boils on their arms, hands or fingers. Following a cold the mucopurulent discharge from the nose contains millions of staphylococci. It is therefore impossible to exclude staphylococci from our environment.

Fortunately, not all staphylococci can cause food poisoning, but at the present time we do not know what percentage of all staphylococcus strains have this property. There is reason to believe that food-poisoning staphylococci represent only a small portion of all the strains. In order to cause food poisoning, a food-poisoning strain of staphylococcus must first grow in a food and produce its poison.

It is the poison and not the staphylococcus itself which causes illness in man. This illness usually comes on within 2½ to 3 hours after eating the poisonous food, and it gives rise to nausea, vomiting, cramps, diarrhea and in severe cases, acute prostration. The acute illness is usually of short duration and may be over in 5 or 6 hours. In severe cases patients may be incapacitated for one

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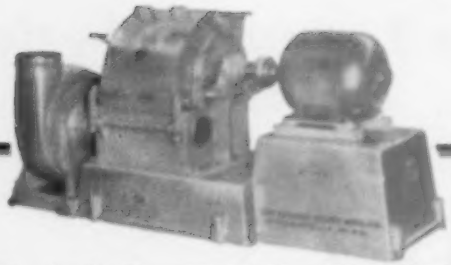

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or two days, although people afflicted are generally up and about their business the following day. Occasionally death occurs, but only among debilitated people, young children or the aged.

The staphylococcus was one of the earliest germs to be associated with disease. As early as 1884 it was found as the principal organism in cheddar cheese which had made people ill. When either the cheese itself or cultures of the organism obtained from the cheese were fed to experimental animals, no illnesses developed among them. However, a man working in the laboratory ate a small piece of the cheese and became ill in 2½ hours, thus indicating man's susceptibility to the poison as compared to that of experimental animals.

Following these cheese episodes, further outbreaks involving other food items were reported. Here, too, the staphylococcus was isolated as the principal organism, and again laboratory animals were fed the incriminating foods or cultures isolated from the foods without any ill effects. This difference in susceptibility between experimental animals and man is the reason that so many years have elapsed before staphylococcus food-poisoning was generally recognized.

In 1914 in the Philippine Islands, Dr. Barber traced the cause of his illness, which occurred nearly every time he visited a particular farm, to the milk coming from a particular cow with an infected udder, from which staphylococci were isolated. When he drank the milk taken directly from the diseased udder, no ill effects followed. However, if this milk was allowed to stand at 86 degrees Fahrenheit for 4 to 5 hours, it became poisonous and caused illness when drunk by Dr. Barber and his human volunteers. In spite of this classic work done in 1914, no attention was given to the relationship between staphylococci and food poisoning until after our Chicago experience in the winter of 1929.

The role of staphylococci in food poisoning was rediscovered in 1929 when Dr. W. E. Cary brought to my laboratory two Christmas cakes which had been submitted to him by two of his physician friends who had received them as gifts. The cakes were three-layer sponge cakes with a thick cream filling, ornately iced and decorated with chopped pistachio nuts and maraschino cherries. They had been baked on Dec. 23 or 24 in a commercial Italian bakery in Chicago and were delivered on the afternoon of the 24th. They presumably had been refrigerated at the bakery but were not kept in the icebox by the recipient. The cakes had been served on Dec. 26; one at various times to five adults and three children, and the other for dinner to three adults. All 11 individuals who had eaten the cakes became ill. The victims were from four different families, thus eliminating other food items as the cause of the illnesses. More than half of each cake was available for laboratory study, and laboratory work was begun 15 hours after the cakes had been first cut.

In the laboratory procedures carried out in investigating this outbreak, we encountered the same problems of our numerous predecessors. When the cake was fed to laboratory animals, no ill effects occurred. Tests for mercury and arsenic were carried out and our results, like those of previous workers investigating similar outbreaks, were negative. However, when portions of the cake were fed to human volunteers, severe illness resulted. In a subsequent bacteriological study, human volunteers were made ill when they were fed extracts of the staphylococcus cultures which had been isolated from the cake.

Since this outbreak there has been world-wide recognition of staphylococcus food-poisoning, but our knowledge is still too inadequate to work out a method for its prevention. The poison produced in food by the growth of these food-poisoning staphylococci is resistant to heat, and people have been made ill when such foods have been boiled. Al-

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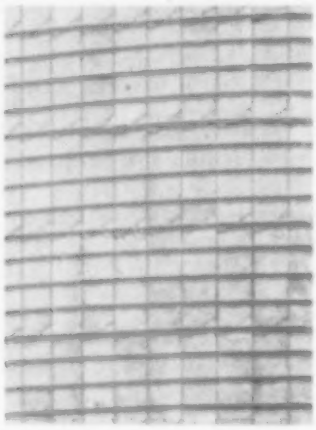

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though boiling kills the staphylococcus, it does not destroy the poison. Salt and sugar in concentrations sufficient to kill the germ which causes typhoid fever do not prevent the staphylococcus from growing and producing its poison.

The staphylococcus, therefore, in comparison with the typhoid bacillus has a wider range of foods in which it can grow. The disease which is caused by the typhoid bacillus living in the intestine of man can readily be controlled by improvements in sanitation, whereas when dealing with the omnipresent staphylococcus, no such control is possible.

Refrigeration a Preventive

Food-poisoning staphylococci do not grow and produce their poison at temperatures obtained in the ordinary, mechanical refrigerators. Therefore, refrigeration of perishable foods is at present the best means of preventing this type of food poisoning. As was indicated in the case of milk from the infected udder of a cow, only 4 or 5 hours at a warm temperature are necessary for the poison to be formed.

In our study of staphylococcus food poisoning we hope to work out more satisfactory methods of control. If this problem had been simple, the answer would have been found approximately 70 years ago. One of the most important objectives of our study is to determine the chemical nature of the poison. Until this is known, it is unlikely that any simple test for the detection of the poison in foods will be forthcoming.

If the chemistry of this substance can be determined and a simple test for its detection worked out, then every food processor will have an available method to determine the presence of the poison in his product. Then, he will also be able to work out process methods to correct this possible hazard. Another approach to the control of this type of food poisoning involves a search for some substance which may prevent either the growth of staphylococci in foods or the formation of the poison, even though growth might occur. Again, this approach is dependent upon a basic, scientific study of the chemistry of the poison.

Thus it is evident that the problem is one common to a broad segment of the food industry. The solution is expensive since the only substitute for the human volunteer in detecting this poison is the use of the monkey or the cat, and the susceptibility of these animals is much less than that of man. After several feeding tests, monkeys become resistant to the poison and it is necessary to replace them. Therefore, it is only fair that the cost be borne by the whole food industry rather than by any one group.

We are pleased with the progress that has been made during the first two years of this study. We feel that we have added considerably to the knowledge of the chemistry of this poison. Since detailed reports of the progress of the work are mailed to the contributing organizations by the liaison committee of the food industries, I will mention only some of the broader lines of attack followed in our investigation.

To begin with, it is important in initiating a chemical study of the poison that we be able to produce it in as simple a chemical concoction as possible. The more complex the chemistry of the material in which the poison is produced, the more difficult is the problem of separating the poison from the other chemical ingredients present. Much time was devoted to this aspect of the problem and a workable method of producing the poison has been developed.

Methods of purification of the poison are at present being developed. To date, ammonium sulfate precipitation, dialysis in cellophane membranes, adsorption on a variety of adsorbing agents and alcohol precipitation have been used. The most highly purified product we have prepared is of such potency that a pound of it would be sufficient to cause illness in 300,000 monkeys or several million people.

Since each step of the work involves feeding monkeys to make sure the poison is present, the amount of work involved is enormous. To date 250 monkeys have been used and 1,514 monkey feeding tests accomplished.

Detection Test Sought

Although a search is being made for chemical substances to inhibit the growth of food-poisoning staphylococci and/or the poison produced by it, this work cannot be advanced rapidly without a simple test for detecting the poison. For that reason the majority of our efforts at the present time are being devoted to the chemical study of the poison, and basic research leading toward the development of inhibitors is carried on only during inevitable time lags in this program.

At the present time, staphylococcus food-poisoning is very costly to the food industry. It is only by a determined and patient effort that this problem can be licked. With the present tools of science the problem is solvable, but it would be folly to predict a definite time for the solution. We have been unusually fortu-

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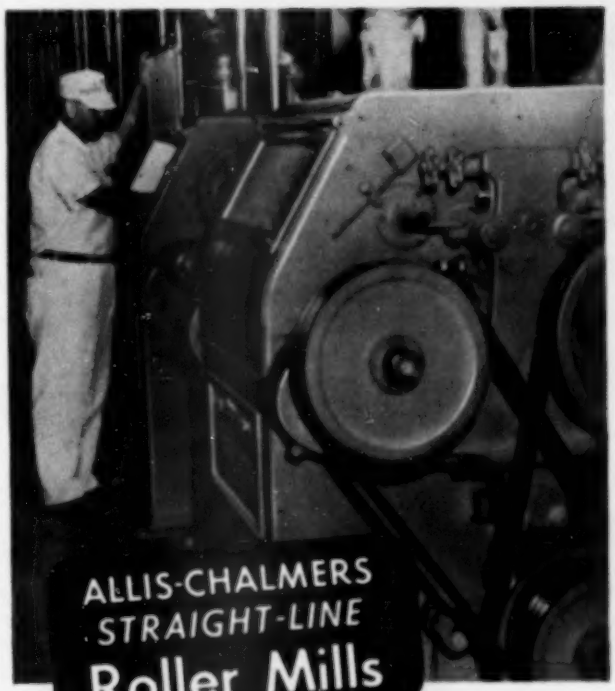

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nate in receiving technological support not only from scientists in the universities but also from those in industry. I am proud to report that industry is taking the lead in trying to solve this problem which has remained status quo for the past 20 years.

Discoverer of a New Science

By J. Gilbert Hill

AMERICA'S bread, rolls and cake is better and more uniform because of R. H. "Bob" Jordan, federal grain inspector of Oklahoma City, a high school graduate who has taught a science he fathered, and still leads, in college.

Mr. Jordan is nationally known now in the wheat business as the man who first said varieties of wheat could be selected, grain by grain, from a given sample.

He also contended that variety of grain was more important than the season, or the type of soil, in the production of the final flour, and product of the bakery.

Millers, farmers and grain buyers who had been looking at wheat, too, all their lives thought Mr. Jordan was crazy. But they liked—and respected—him too much not to at least investigate by sending him samples.

When Mr. Jordan's counts began to prove out in mill laboratory bakeries they were impressed. But, then they tried to cross him up by sending the same samples under different numbers. His results still checked.

Soon he was speaking at meetings and finally was called to Kansas State College to lecture. And his students now are doing the work which he said was possible throughout the grain belt, saving days of time and thousands of dollars in storage charges caused by delay in testing grains before they are dumped into bins to be mixed wth other grains which they might help—or ruin—for flour.

He was born in the business. His father before him was a grain inspector. He even raises a little wheat himself on a farm near Oklahoma City. In his early days 99% of the grain produced was of Turkey parentage, and 70% of the flour was sold to housewives who made their own bread.

Now, there are literally dozens of varieties and 70% of the bread is made by commercial bakeries, who use large, mechanical mixers and every possible type of control.

Most of the nation's wheat is produced for bread. It grows in the high, dry plains—up through the area many folks mistakenly fear as the dust bowl of the future—from Texas, Oklahoma, Kansas, through parts of New Mexico, Colorado, Montana, and Nebraska, as winter grain—then into Canada, North and South Dakota and Northern Nebraska as spring wheat.

Turkey wheat produces a "strong" dough. It can be beaten for hours, then rises again, to produce the kind of light, white bread America loves. It was so strong that it was a nuisance to the housewives who had to mix it by hand. American bakery mixers were designed and built when it was the dominant grain, to beat it hard.

About 25 years ago, farmers began to see new types of wheat as the breeders got busy. To understand the relatively slow progress, Mr. Jordan explains that a single grain of wheat standing in a field will not mix or breed with its neighbors unless a cross is made by hand. Rows of wheat will stand side by side in the nursery without crossing.

The first new variety was Tenmarq, a cross of Marquis, a strong spring wheat with Turkey, produced by Dr. John H. Parker. It made more bushels to the acre. Millers liked the flour it made. But the test weight was light and farmers prices were reduced at the elevator.

In the southwest there was a rash of new varieties. Each had its talking point. It yielded better, was resistant to insects or disease, matured early to speed up summer work, or had higher test weights to bring a price premium.

Along came Chiefkan, Red Chief, Early Blackhull, and others. The grain inspector thought he saw something coming and began to study wheat kernels. More than 10 years ago he announced he could separate varieties.

Bakers began to kick to millers. The dough began to "break down" to produce tough, soggy bread. Gluten, which always before had been thought to depend on protein content, was breaking down under mechanical mixing. Tests in the laboratory revealed Chiefkan had a high protein content. But he contended that its percentage was wrong to produce a strong wheat. Baking tests proved his theory.

Millers Doubted Accuracy

Still, millers were reluctant to believe that variety was so important until they made test after test. Now almost every large mill has an expert who counts samples from cars before the grain is unloaded into a specific bin. It saves days formerly needed to grind a sample into flour and

bake it to find out what it would do—although they're still doing it before they make a large grind.

Now the mills are producing two kinds of flour, one which will mix easily for the housewife and another that will stand up and take the mechanical beating of commercial bakers. One of the most interesting of the new varieties in the southwest is Early Triumph, created by an individual breeder, Joseph Danne of near El Reno, Okla.

Mr. Danne won't tell the parentage of his variety. Millers know that the grain, by itself, produces an almost perfect family type flour. It is sweeping the country in Oklahoma and Kansas because it does produce well, resists insects and diseases and has a good test weight.

Mr. Jordan is the only one who will even guess at what Mr. Danne has done. He said the parentage is Early Blackhull, a selection from Turkey, crossed with Mediterranean, a hard wheat. It grows well in the wetter section of the wheat belt.

But Comanche, which is a Tenmarq selection, crossed back to Oro, a Turkey selection developed in Oregon, is doing better in the deep, dry soils of the high plains. It's one that the commercial bakers like.

Another wheat doing well in the high plains, particularly in Texas, is Westar. Mr. Jordan looks at the grain and says it's parentage is Kanred, a Turkey wheat which has been crossed with Hard Federation, a white wheat, then crossed again with Tenmarq.

In general, the expert classes wheat as hard wheat for flour, soft wheat for cakes, white wheats which grow in the irrigated areas primarily for crackers and the durum wheats, an extra hard grain grown in the north and used for macaroni and spaghetti manufacture.

There are many people in the U.S. who can't tell one breed of cow from another. But it makes a difference as to whether the animal is good for beef, or milk, or both, and most livestock men can tell it at a glance.

Mr. Jordan says there is as much difference in grain, and he's teaching grain men the qualities which make for the kind of product he wants to sell.

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Grain Weevils Have Plagued Millers Before

By Kunigunde Duncan

MILLERS who have expended a large amount of money and time in their separate battles with insect infestation may get some comfort and perhaps a little wisdom from considering the canny little bug and his long reign on earth. How many kinds of weevils there may once have been, we can't say, though they were referred to centuries ago as "tribe"; but there still are 600 genera and 20,000 species making a good living, happy and hopeful.

Commerce has carried the granary weevil to all ports on the earth where it flourishes mightily, regardless of climate. Chiefly, because it requires slightly more then a month to grow from egg to adult. There is also that trifling biological factor that each female lays about 250 eggs, each in its separate kernel, of course, which makes populating of a grain storage bin a trifling job.

Back in the year 1000, when British Isiers believed insects were generated spontaneously in grain, they just spooned them out of the batter the best they could, and went on with the baking. Doubtless they had many a profane name for the little pest, but they certainly had a refined name for him, too, given him, it seems, because of his jitter-bug activities, his weaving about and skittering out of sight. This one name was spelled just 35 different ways, in different times and places, just as you are going to find it jitter-bugging its spelling here. Those Britishers spooned the wyvils from the batter. But wuffels in grain for brewing liquor were not so easily stomached. They strained the liquor, yes; but the results were not all that a gentleman of even the year 1000 could wish for.

And they went to law over infested grain, blaming the farmer. The set-upon farmers got their heads together on market-days and exchanged tales of woe. But nobody had a remedy. Then, somehow, after another 400 years, the webble-blame went to the grain merchant. Said one commentator in court, "Whether ye grainne be bad or gude, all is cast together in so great a multitude no man can keep it frome the wible-worm that eateth sorely."

Then, in 1669 Law, herself, solved it! She said in august authority: "All grain shall be winnowed before it be laid in any garners, else there will breed wyvels in it." It was a law that failed completely. King Weevil wasn't even phased by it and while he reigned with waxing power, once more the pendulum of blame swung back to the farmer and laid the wyvyl (wivel, wevel, wibl, wibil) curse at his door. But by now the farmer had found his public tongue and his answer was ready and to the point, placing blame where it really belonged. "The husbandman createth not the weawell in the grain, either corn or barley. It is the Lord that so doeth."

Thus, with such an answer, the problem rested back as one that could never be solved, short of superhuman intervention. Accepted as having been sent by the Lord, the wevyl (wevill, webill, weavel) nevertheless became the symbol of treachery, disaster and all things despicable. A member of Parliament, hurling invective at those rights-of-man folk who, later, went to found America, had his comparisons pat: "Mothes are not worse in clothes, rust in iron, nor weals in mault and grain than such men in the Commonwealth." And Lord Bacon, wrote of men, "worms, called wevils that feedeth

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at the heart." Thus, no remedy yet. Only fit similes for orator and writer. So long as the grain was not wholly destroyed, it was baked into bread (whules and all) and malted into liquor.

By 1750 a practical publication, Country Housewife, had it! "Whools," it advised, "or weavells or maggots may be screened or sifted from the flower before using."

But all this was later refused and even reviled as a real remedy by The Compleate Farmer. Screening and straining only rid bread and liquor of "Weabel carcasses." Real help should be earlier. It had no solution, itself, only added a new doleful strain to the weabel-lament: "Now pease, as well breed wheuls. In New South Wales it is seldom six months before they be eaten out." Evidently folks didn't mind—much. As late as 1838, Stevenson, writing in "Treasure Island," remarked: "If you were set to pluck the wevil from a biscuit, you would catch them all." —whether dead from baking, or alive and on the hunt, is not clear. By now Science took a hand. Some one discovered: "Not one, but many kinds of whules infest grains."

Those "Weals of the Commonwealth who had come to America seem to have had more finicky stomachs than their forebears. They took out the grain periodically and sunned and winnowed it and got along a little better than fairish." Civil War times saw the War Department specifying "beans and wheat should be dry and hard and free from weevil." Specifications proper enough; but the prisoners at Andersonville, as well as many a buck private topped all weevil-story then extant with hard-tack population figures.

But that was the War Department and that was soldiering. Dancing young folk of the period made a song on the weevil theme. "The Lord only knows why or what they meant," a present-day singer of the song told me. "Starts out sensible enough, but turns blamed foolish on the chorus."

The author of none of the many versions of this song is not known. Like most folk-songs each version has probably had more than one adder-to, besides the maker of the original rhymes. The version that seems most likely to be the original begins:

O Charley, he's a nice young man,
O Charley, he's a dandy,
Every time he goes to town
He brings the girls some candy.
He'll take a girl by the lily-white hand
And lead her like a pigeon
And make her dance the Weevilly-Wheat
Till she loses her religion.
The higher up the cherry-tree
The riper grows the cherry.
The more you hug and kiss the girls
The sooner they will marry . . .

And so on for 28 verses. But, whichever the version the chorus is always much alike:

O I won't have none of your weevily wheat
O I won't have none of your barley:
I'll take some flour in half an hour
And make a cake for Charley.

This song was sung at the hoe-down dance, or break-down, both dance and its name borrowings from the Negro. Dancing waxed hot and furious and ended only when dancers were breathless from singing their own dance music. In Illinois, in the Lincoln country, when Lincoln lived there, the song was given a super-chorus:

O, it's right arm round your weevily wheat,
O, its left arm round your weevily wheat,
O, it's both arms round your weevily wheat,
O, it's swing, O swing your weevily wheat!

No farmer or warehouseman or miller or housewife has to be told of the weevil's mysterious and sudden appearance. Whether he be saw-toothed or plain snouted, black, brown or red, one-tenth or three-fourths of an inch in size, he takes many chances to make his fortune from men's grain-piles. He can sneak into them in the field, in truck or wheat-car in transit, elevator, flour mill, warehouse or kitchen flour-bin. If he misses one place, he can try all the others. He is beginning to stop talking back to our nice poison gases which he blows in on him in our grain piles, big and little, in warehouses and elevators and mills and in truck and train and farm storage tanks.

But we can't get rid of him entirely. He will always be here—in the language. Because of his enterprising nature, the English, long ago, made a verb of him—wolvie—to wriggle. Long after he has breathed his last men will still be calling men weevils, will still be referring to any underhanded, fatal handling of business, politics or international relations as being weeviled.

And he'll keep on in literature—probably with necessary footnotes—even as he has already gone, without them—weeviled into the language by long centuries of men's being plagued with him. He has remained rooted as securely in a couplet of Alexander Pope as ever he was in a wheat kernel:

The French are downright devils.
In heavenly wheat, accursed, destructive weevils!

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Operating records show that "ENTOLETER" Control destroys insect life in all its forms, in flour, meal, mixes, cereals, powdered soups and similar free-flowing dry materials. In addition to its primary function of insect control, the "ENTOLETER" system is an excellent means of blending flours, mixing compounds and improving vitamin distribution. It is wholly mechanical; uses no heat, gas or chemicals, and does not change moisture content of "ENTOLETER" products. The system is easy to install; simple to operate and maintain. Send coupon now for full information on "ENTOLETER" Control. We shall be glad to show how it can be applied to your products.

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Insecticidal Sprays

(Continued from page 1a)

efficiency. For this reason, in all but two cars, spray materials were applied to the walls and floor of the car with an electrically operated sprayer at the rate of 1 gallon per car, approximately 1 gallon per 1,000 square feet of surface. An atomizer-type nozzle was adjusted to give a coarse spray. Two cars were treated with each kind of spray tested. For comparison, two cars were treated with an aerosol containing 1.66% of DDT, 5% of chlordane, 0.83% of methoxychlor, 0.013% of pyrethrins, and 0.1325% of piperonyl butoxide, in light oil, by use of a small mechanical fogging apparatus. This machine was allowed to operate for 5 minutes in one of the two cars to receive this type of spray and 10 minutes in the other. The treated cars remained filled with fog for at least 1 hour after treatment and received a uniform deposit of spray on the walls, which was quite noticeable up to about 1 foot from the roof.

After the cars had been sprayed, a narrow strip of kraft paper was laid on the floor at each end of each car and eight 10-lb. cotton sacks of flour*, that had been treated by centrifugal force machine and sifted to kill and remove all insects, were placed on each strip of paper. This gave a total of 16 sacks of flour per car. Two sacks of flour were removed from each end of each car on the 3rd, 7th, 10th, and 14th days after treatment. The flour was carefully sifted after removal from the cars, and a record was made of the insects found in each bag. Data regarding the treatments given the cars and the kind and number of insects found in the bags of flour are given in Table 1. A summary of the data is given in Table 2. The insecticides used in the different sprays are shown in the tables as percentages of the total weight of insecticide and carrier.

*The flour for this test was donated by the Innset-Hincks Milling Co., Topeka, Kansas.

Table 5—Number of insects found in 16 bags of flour from each of 16 treated cars during a two-week period after treatment. Spray applied at rate of 1 gal. a car.

Spray Applied—	Bags infested	Insects per 16 bags
Pyrethrins .1% and piperonyl butoxide 1% in odorless kerosene in oil emulsion	1	1
	3	4
Chlordane 1% in emulsion	1	1
	4	6
		Av. 2.5
Aerosol *		
1 qt.	3	4
2 qt.	2	2
Lindane .01% in odorless kerosene	1	1
	6	11
		Av. 6
Toxaphene 1% in emulsion	1	1
	4	6
		Av. 3.5
DDT 1%, as wettable powder in suspension	6	7
	6	8
		Av. 7.5
Methoxychlor 1%, as wettable powder in suspension	10	15
	11	19
		Av. 17
Check, untreated	15	42
	16	79
		Av. 60

*See text for formulation.

On the third day after the cars had been treated and at the time the first lot of bags were removed, observations were made in each car. Many dead insects were seen scattered over the floors, but live insects were seen in only a few of the cars. A few live insects were observed crawling over the bags of flour in one of the untreated cars and in one each of the cars treated with methoxychlor and lindane. On the 14th day one live insect was observed crawling on a bag of flour in each of the cars sprayed with toxaphene and lindane, and two were observed on a bag in one of the cars sprayed with methoxychlor.

The results of this experiment indicate that any of the treatments except the methoxychlor spray would aid greatly in protecting flour shipments from insects, even if the cars were heavily infested prior to treatment. However, the data obtained from this one limited experiment do not permit any dependable conclusions as to the comparative efficiency of the sprays. It must also be recognized that some of the insecticides might be more effective if used in different formulations or higher dosages. Further tests to determine the efficiency of these and other residual sprays for use in boxcars are contemplated.

—BREAD IS THE STAFF OF LIFE—

MANLIFT SAFETY BOOKLET SUMMARIZES REGULATIONS

NEW YORK—A safety code for manlifts has been published by the American Standards Assn. The code is a consensus of the experiences of manufacturers, users, insurance groups, enforcement officials and independent specialists and was sponsored under ASA procedure by the Association of Casualty and Surety Companies and the American Society of Mechanical Engineers.

It is believed to be the first guide on this subject ever to be published.

The code was developed as a guide for state and municipal authorities in drafting regulations for the use of manlifts, where their use is now permitted. It is also intended as a standard reference on safety requirements for manufacturers, architects, plant designers and consulting engineers, and for users of the equipment.

Construction, maintenance, inspection and operation of manlifts in relation to accident hazards to industrial workers are covered by the code. It includes general requirements for design and installation, mechanical requirements, automatic safety devices, emergency controls, recommendations for instruction and warning signs, operating rules, and tests.

Copies of the code are available from the American Standards Assn., 70 E. 45th St., New York 17, at 55c each.

—BREAD IS THE STAFF OF LIFE—

CHEMISTS HEAR TALK ON BAKING INDUSTRY GROWTH

NEW YORK—Dr. William H. Cathcart, national bakery division laboratories, Great Atlantic & Pacific Tea Co., presented important factors in modern industrial and production trends in the baking industry during his talk at the February meeting of the New York Section of the American Association of Cereal Chemists.

Dr. Cathcart, in citing the tremendous growth of the industry during the past 50 years, stated that such important factors as competition, costs, changed concepts of sanitation and food laws have been strong contributors to new developments.

New trends in bulk handling of ingredients, prepared mixes, enrichment, continuous mixing, anti-staling agents, dielectric defrosting, insect-repellent paper ingredient bags, light sterilization and pre-baked bakery products, as he discussed them, were of interest to the group.

—BREAD IS THE STAFF OF LIFE—

EXPLOSION-PROOF

Design of the elevator in connection with the General Mills, Inc., plant at Los Angeles, Calif., is unique in that roofless, steel storage bins and headhouses have replaced the conventional concrete structures. The sealed, weather-proof distributing conveyors above the storage bins are out in the open. The slide gates in the distributing system are hydraulically controlled and the system is interlocked.

An inert gas displaces the air in the stored grain. As grain is drawn out of a tank, a pressure control system detects it and diverts the proper amount of gas to that bin, thus maintaining the specified pressure. The possibility of a dust explosion with this type of set-up is very remote, safety engineers state.

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FEEDSTUFFS—a weekly paper for the feed manufacturer, jobber, broker and dealer—gives its readers prompt information about the products they use, buy and sell. It is the only newspaper of the feed trade. In addition to its paid circulation—largest in the field—selective controlled distribution blankets the industry.

MILLING PRODUCTION is a monthly technical journal for operative millers, cereal chemists and their associates. Its circulation is carefully selected to assure advertisers complete coverage of key personnel in the production departments of the flour milling industry. Its readers recommend what to buy.

THE AMERICAN BAKER, published monthly, brings to the big buyers of the baking industry all the news of the breadstuffs world. It reviews and analyzes the factors influencing the flour market—nerve center for bakery profits. It suggests what to make and how to sell it. Its selective readership makes it a powerful advertising medium.

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ADVERTISING DATA

HOW MANY WEED SEEDS IN THIS FIELD?

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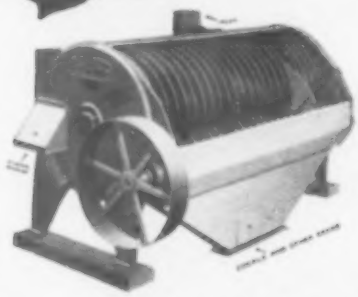

Carter Disc Cockle Machine thoroughly removes cockle, wild peas, small vetch, buckwheat, mustard, and other small seeds shorter than wheat. Machines can be installed singly or in multiple units.

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Nobody could count the weed seeds in a wheat field — but in fields where combine threshing is practiced, weed seed content *is* increasing. This presents a problem to the miller who is striving for a top quality product. Cockle particularly lowers the baking quality of flour. Best solution is to clean all your grain on Carter Disc Separators — which remove both shorter and longer foreign material with amazing accuracy. Carter Disc Separators are standard equipment in mills throughout the world. Available in a wide range of sizes and capacities. Get full details now.

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